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EARTHWORK TABLES

BY

D. CUNNINGHAM. C.E.

TABLES

FOR

FACILITATING THE CALCULATION OF EARTHWORK

IN THE CONSTRUCTION OF

RAILWAYS, ROADS, CANALS, DAMS,

ETC.

BY

DAVID CUNNINGHAM,

CIVIL ENGINEER.

LONDON:

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TO

Benjamin Hall Blyth, Esq.

AND

Edward Lawrence Ireland Blyth, Esq.,

CIVIL ENGINEERS, EDINBURGH,

IN TOKEN OF

FRIENDSHIP AND ESTEEM,

BY THEIR FORMER PUPIL,

THE AUTHOR.

PREFACE AND INTRODUCTION.

A COMPLETE set of Earthwork Tables has been hitherto a desideratum. I have constructed the following in order to supply what I consider, and have felt to be, and what I believe is generally felt to be, a want. These, starting with a base of six feet in breadth, advance, by successive increments of one foot, up to 36 feet of base. Thence we advance to 38, 40, 45, terminating with 50 feet. In each of the Tables, the four slopes in most general use, viz. ½ to 1, 1 to 1, 1½ to 1, and 2 to 1, have respectively two columns, and I have arranged them in the manner which I believe will be found the most convenient in every-day practice. With the exception of the first four Tables, which are calculated to bases so narrow as to call for a depth of not more than 30 feet, all are calculated to a depth of 60 feet, with intervals of three inches for the thirteen bases which are in most general use, and of six inches for the remaining bases.

Supplementary Tables are added which may be used in a variety of ways, but which are chiefly intended to supply intermediate slopes which are not given in the Tables of Bases. The unit of length is taken at one English foot, which I think will be found better than any multiple of it; and if the longitudinal scale of the section to be calculated be in links instead of feet, the contents of each cutting or embankment, as obtained from the Tables, will be correctly reduced by multiplying it by 66 and dividing by 100, or, which is the same thing, multiplying simply by ·66. The formulæ by which I have calculated the tabular numbers have permitted great compression of matter valuable for prompt reference, with a completeness of result beyond what I have yet found in Earthwork Tables. The first of these qualities is eminently obtained in Mr Bidder's Tables, and the second perfectly in Sir John MacNeill's; but the former from over-condensation, and the latter from their unwieldy expansion, are alike unsatisfactory.

I have appended a Table designed for the rough but speedy measurement of Earthwork by means of transparent paper or horn, which will be found of great use by Resident Engineers and Contractors in the cursory measurements of works; it has been of eminent service in my own practice. A Table for the speedy calculation of land to English and Irish acres is also added, as well as Tables of Gradients, and Resistances on Roads, which may prove useful in laying out lines.

I have checked the whole by such an accurate method, and in such a careful manner, as induces me to believe that no error lies undetected, but that the whole, even to the last decimal, will warrant the confidence which I hope will be placed in, and the favour which I trust will be given to, these Earthwork Tables.

D. C.

INNERLEITHEN, *May* 1865.

EXPLANATIONS AND EXAMPLES.

ALL the following Tables, with the exception of Supplementary Table (B), and the five last, Nos. XXXVI. to XL. inclusive, are constructed upon the same plan, and derived from the same two formulæ. These formulæ $\frac{L\left(\frac{H+h}{2}\right)(B+\frac{H+h}{2}S)}{27}$ and $\frac{L\left(\frac{H-h}{2}\right)\left(\frac{H-h}{2}\frac{S}{3}\right)}{27}$ respectively represent the columns headed 'Centre and Slopes' and 'Add half difference of heights,' L being the length, taken at one English foot in calculating the Tables; H and h the heights at either end of the section measured; B the breadth of base; and S the ratio which the horizontal bears to the vertical in the side slopes; and upon dividing the results thus obtained by 27, cubic feet are reduced to cubic yards. It will be at once seen that the importance of the second formula depends entirely upon the difference between the two end heights; and it may be remarked, that unless this difference be at least ten *per cent.* of the average height, the inaccuracy resulting from the neglect of the corresponding tabular number is so inconsiderable, that it may be disregarded. This will be evident by comparing the second column with the first under each slope in the Tables, and in referring to the examples which are worked out by these formulæ.

DEMONSTRATION.—Let ABCD and ABEF be two vertical cross sections of the prismoid formed by the cutting (or, if inverted, by the embankment) of a railway, road, or other similar work. Draw Ad perpendicular to AB, and let Ad be the average height of the two cross sections: through d, draw ge parallel to, and Dgh, onB, kCm, and lef, perpendicular to AB.

Then:—

(1.) L × ABCD ≐ the solid content of the prism ABCD.

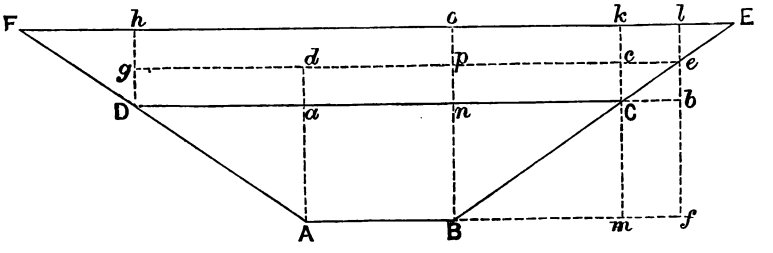
(2.) $\frac{L}{2}$ × DCkh, or L × DCcg ≐ the solid content of the wedge DCkh.

(3.) $\frac{L}{3}$ × (FDh + ECk) or $\frac{2L}{3}$ × ECk ≐ the solid content of the pyramids FDh and ECk.

Now the ratio of the slopes being the same on either side, DAa = CBn = CBm, and ABCD = AmCa. Also Bn : nC :: Cc : ce, therefore Bn × ce = nC × Cc; but Bn = mC, and ce = Cb, therefore Bn × ce = mCbf = nCcp = aDgd.

We have, therefore, the prismoid ABCDEF minus the pyramids DFh and CEk equal to the rectangular solid Afed minus the rectangular solid Cbec. Comparing the subtractions, we have by construction be = el, and Cb = kl, and Cbec = $celk$; also the sides and angles of the triangles Cce, Cbe, eEl, are respectively equal to each other,

therefore the triangles are equal. Adding C*ce* to each of the other two, we have C*ce* + *e*E*l* = C*bec*; but C*bec* ≐ *celk*, therefore the triangle CE*k*, which is the base of one of the pyramids, is double the parallelogram C*bec*, which is the base of the solid prism C*bec*. Since, for the solid content of the two pyramids, we must multiply



the length of the section by one-third of the area of the base of each, or two-thirds of one, the base of the prism C*bec*, being one-half the area of one of them, will give a result too small by one-sixth. The addition, however, which is necessary, is always easily obtained from the difference of the heights, and the ratio of the slopes, which are taken with reference to one-sixth the base of one of the pyramids. The expression $L \times \left(\frac{H-h}{2}\right) \times \left(\frac{H-h}{2}\frac{S}{3}\right)$ will therefore give the true addition to the solid obtained from L × A*fed*, which is expressed generally by the formula $L \times \left(\frac{H+h}{2}\right) \times (B + \frac{H+h}{2} S)$ as above.

The general formula for Trapezoidal solids, viz :—

$$\frac{\{\text{Sum of areas of both ends} + 4\ (\text{area of middle})\} \times \text{length}}{6}$$

becomes, when applied to the Prismoid under consideration,

$$\frac{L\left\{H(B+SH)+h(B+Sh)+4\left(\frac{H+h}{2}\right)\left(B+\frac{H+h}{2}S\right)\right\}}{6\times 27}.$$

EXAMPLE. Let the accompanying diagram represent a section affording a sufficiently difficult type of what occurs in daily practice, of which the breadth of base is 16 feet and the side slopes 1½ to 1 : it will be necessary, in order to compare the different methods, to calculate the cubic contents of it :—

(1.) By the Trapezoidal formula just stated.
(2.) By the Prismoidal formulæ.
(3.) By the Tables to three decimal places.
(4.) By the Tables to two decimal places.

(1.) By the Trapezoidal formula :

$$\frac{\text{Cubic feet}}{6} = (288 \text{ cub. ins.})$$

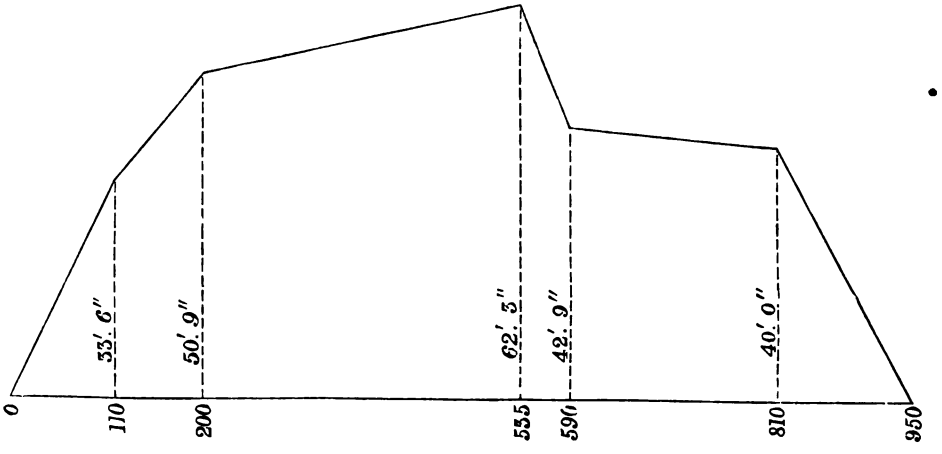
$$110 \times \left\{\begin{matrix}(33'.6'' \times (16'.0'' + 50'.3'')) \\ +4\,(16'.9'' \times (16'.0'' + 25'.1\tfrac{1}{2}''))\end{matrix}\right\} = 547{,}222$$

$$90 \times \left\{\begin{matrix}(33'.6'' \times (16'.0'' + 50'.3'')) \\ +(50'.9'' \times (16'.0'' + 76'.1\tfrac{1}{2}'')) \\ +4\,(42'.1\tfrac{1}{2}'' \times (16'.0'' + 63'.2\tfrac{1}{4}''))\end{matrix}\right\} = 1{,}821{,}402$$

2,368,624

$$\begin{array}{rl} & 2{,}368{,}624 \\ 335 \times \left\{ \begin{array}{l} (50'.9'' \times (16'.0'' + 76'.1\tfrac{1}{2}'')) \\ +(62'.3'' \times (16'.0'' + 93'.4\tfrac{1}{2}'')) \\ +4\,(56'.6'' \times (16'.0'' + 84'.9\ '')) \end{array} \right\} & = 11{,}474{,}918 \\ 55 \times \left\{ \begin{array}{l} (62'.3'' \times (16'.0'' + 93'.4\tfrac{1}{2}'')) \\ +(42'.9'' \times (16'.0'' + 64'.1\tfrac{1}{2}'')) \\ +4\,(52'.6'' \times (16'.0'' + 78'.9'')) \end{array} \right\} & = 1{,}657{,}234 \\ 220 \times \left\{ \begin{array}{l} (42'.9'' \times (16'.0'' + 64'.1\tfrac{1}{2}'')) \\ +(40'.0'' \times (16'.0'' + 60'.0'')) \\ +4\,(41'.4\tfrac{1}{2}'' \times (16'.0'' + 62'.0\tfrac{3}{4}'')) \end{array} \right\} & = 4{,}264{,}631 \\ 110 \times \left\{ \begin{array}{l} (40'.0'' \times (16'.0'' + 60'.0'')) \\ +4\,(20'.0'' \times (16'.0'' + 30'.0'')) \end{array} \right\} & = 940{,}800 \\ & \overline{20{,}706{,}207.} \end{array}$$

$\div (6 \times 27) = 127{,}816{\cdot}09$, total cubic yards.



(2.) By the Prismoidal formulæ :

Cubic feet.

$$\begin{array}{rl} 110 \times \left\{ \begin{array}{l} (16'.9'' \times (16'.0'' + 25'.1\tfrac{1}{2}'')) \\ +(16'.9'' \times 8'.4\tfrac{1}{2}'') \end{array} \right\} & = 91{,}204 \\ 90 \times \left\{ \begin{array}{l} (42'.1\tfrac{1}{2}'' \times (16'.0'' + 63'.2\tfrac{1}{4}'')) \\ +(8'.7\tfrac{1}{2}'' \times 4'.3\tfrac{3}{4}'') \end{array} \right\} & = 303{,}567 \\ 335 \times \left\{ \begin{array}{l} (56'.6'' \times (16'.0'' + 84'.9'')) \\ +(\ 5'.9'' \times 2'.10\tfrac{1}{2}'') \end{array} \right\} & = 1{,}912{,}486 \\ 55 \times \left\{ \begin{array}{l} (52'.6'' \times (16'.0'' + 78'.9'')) \\ +(\ 9'.9'' \times 4'.10\tfrac{1}{2}'') \end{array} \right\} & = 276{,}205 \\ & \overline{2{,}583{,}462} \end{array}$$

$$220 \times \left\{ \begin{matrix} (41'.4\tfrac{1}{2}'' \times (16'.0'' + 62'.0\tfrac{3}{4}'')) \\ +(\ 1'.4\tfrac{1}{2}'' \times 0'.8\tfrac{1}{4}'') \end{matrix} \right\} = 2{,}583{,}462 \ 710{,}772$$

$$140 \times \left\{ \begin{matrix} (20'.0'' \times (16'.0'' + 30'.0'')) \\ +(20'.0'' \times 10'.0'') \end{matrix} \right\} = 156{,}800$$

3,451,034.

$\div 27 \doteq 127{,}816{\cdot}07$, total cubic yards.

(3.) By the Tables to three decimal places :

$110 \times 30{\cdot}708^* = 3{,}377{\cdot}880$

$90 \times 123{\cdot}548$
$1{\cdot}378$
$124{\cdot}926 = 11{,}243{\cdot}340$

$335 \times 210{\cdot}829$
$\cdot 612$
$211{\cdot}441 = 70{,}832{\cdot}735$

$55 \times 184{\cdot}235$
$1{\cdot}760$
$185{\cdot}995 = 10{,}229\ 725$

$220 \times 119{\cdot}623$
$\cdot 035$
$119{\cdot}658 = 26{,}324{\cdot}760$

$140 \times 41{\cdot}481^* = 5{,}807{\cdot}340$

$127{,}815{\cdot}780$, total cubic yards.

(4.) By the Tables to two decimal places :

$110 \times 30{\cdot}71^* = 3{,}378{\cdot}10$

$90 \times 123{\cdot}55$
$1{\cdot}38$
$124{\cdot}93 = 11{,}243{\cdot}70$

$335 \times 210{\cdot}83$
$\cdot 61$
$211{\cdot}44 = 70{,}832{\cdot}40$

$85{,}454{\cdot}20$

* NOTE.—The tabular numbers marked with an asterisk may be taken directly from the left-hand 2 to 1 column, as the addition of half the difference of the heights, when equal to half the sum of them, to the base and side slopes $1\frac{1}{2}$ to 1, is equal to the base and side slopes 2 to 1. The reason of this is obvious from the formulæ : the ratio of the slopes in the right-hand column being one-third that in the left-hand column, and the heights remaining the same, we have $\frac{1\frac{1}{2}}{1} + \frac{\frac{1}{2}}{1} = \frac{2}{1}$ which is the ratio of the slopes contained with the same base in the left-hand column of 2 to 1 slopes.

85,454·20

55 × 184·23
1·76

185·99 = 10,229·45

220 × 119·62
·04

119·66 = 26,325·20

140 × 41·48* = 5,807·20

127,816·05, total cubic yards.

Comparative Results.—These results, checking each other as they do to less than one-third of a cubic yard upon nearly 128,000, will be recognised to be more than sufficiently accurate for the nicest calculations.

By (1) method, 249 figures are required in the statement of the computation as above, and 606 additional are necessary in the calculations, altogether 855 figures.

By (2), the comparative numbers of figures are respectively 176 and 511, together 687.

By (3), the numbers are 142 and 168, together 310.

By (4), they are 102 and 138, together 240.

Thus it will be readily seen that the Tables are constructed upon an accurate principle. It will also be seen what advantages they present, not only in saving the notation and calculation of many figures, but in the reduction of the chances of inaccuracy to a minimum, which, in decimal or duodecimal work of such an elaborate description as the first two methods call for, is important.

If the section be measured longitudinally in links instead of in feet, then the result already obtained must be multiplied by ·66 in order to reduce it to the true cubic content, which is done simply thus :—

127,816 cubic yards already obtained.
·66 multiplier to reduce lineal feet to links.

766,896
766,896

84,358·56, total cubic yards in cutting if the length be in links instead of feet.

This, then, may be considered a sufficient example of the common cases which occur. We will now take the case of a cutting, partly consisting of rock and partly of soft material; the rock sloping at ¼ to 1; and the soft, as before, at 1½ to 1; the base being also the same, viz. 16 feet. Let the section be the same as before, but with rock found to compose the cutting up to the intermediate line. The calculations (1) for rock; (2) for soft, will be as follows :—

(1.)

Cubic yards.

60 × 5·33
·20

5·53 = 331·80

331·80

* See note on preceding page.

331·80

90 × 18·53
·15
18·68 = 1,681·20

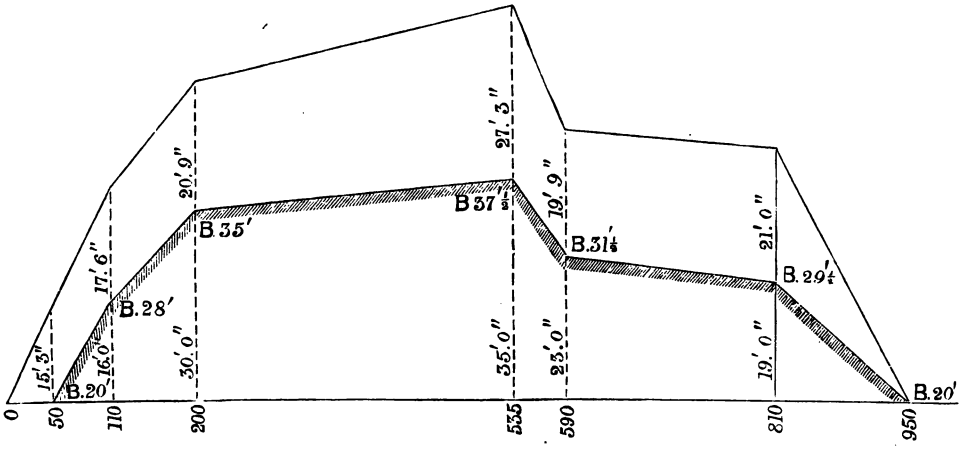
335 × 29·04
·02
29·06 = 9,735·10

55 × 24·97
·11
25·08 = 1,379·40

220 × 16·53
·01
16·54 = 3,638·80

140 × 6·46
·28
6·74 = 943·60

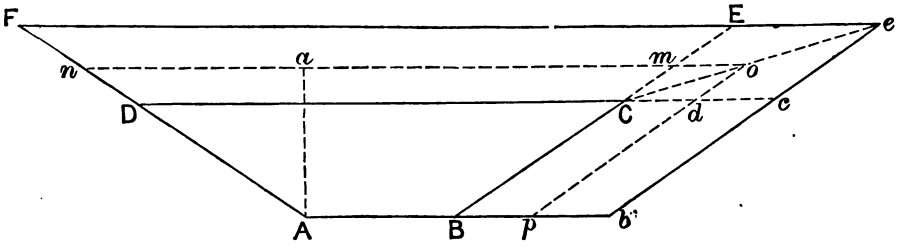
17,709·90, total cubic yards of rock in cutting.



(2.) A few explanatory remarks are necessary before proceeding to the calculation of the soft on the top of the rock. We have seven sections, each of which, except the first, which is independent of the rock, differs both in the end heights and breadths of base. The latter either widen or narrow according as the rock underneath rises or falls; and if we suppose some of the underlying rock to be so much softer and more friable in its nature than that adjoining as to require a flatter slope, this will introduce another disturbing element, which will affect the bases according to the ratio as well as the heights of the slopes. We must not forget also to allow a sufficient margin, or benching, between the face of the rock at top of slopes and the foot of the slopes of the soft material, as is done in general practice to the extent, when the materials are of ordinary stability, of two feet on each side.

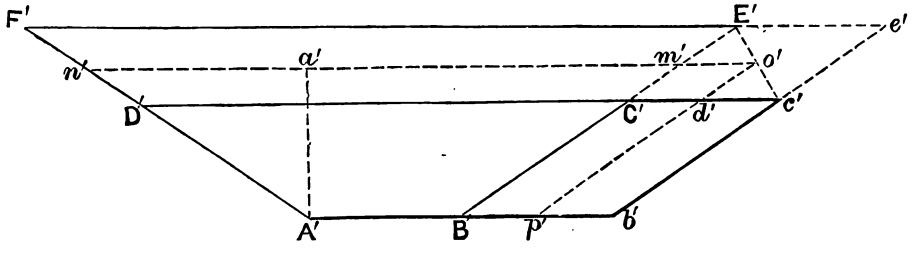
To arrive, then, at the breadth of base of the soft at any point on the section, we have to add together the breadth of the formation, 16 feet, the benching on each side 4 feet, and the horizontal component of the slope of the rock on each side.

Let ABCD, ABEF, and A'B'C'D', A'B'E'F' in each of the accompanying diagrams represent the vertical cross sections at either end of the prismoid already demonstrated, A*a*, A'*a'*, being the average height; and let the width of base at one end be increased by the slope of underlying rock to A*b*, A'*b'*, in the first diagram the increase taking place at the higher end-section, and in the second, at the lower; and let A*p*, A'*p'*, be the average breadth of base. It will be seen that in consequence of the increase of base to *b* and *b'*, the irregular solids B*be*E, B'*b'c'*E' must be added respectively to the prismoids. Let it, however, be supposed that the prisms, B*pom*, B'*p'o'm'*, which are due to the product of the average height, and average increase of base be added; we will compare them with the irregular solids respectively. In the first case, we find the prism B*pd*C equal to the wedge B*bc*C, and



remaining on the one hand the prism C*dom*, and on the other the pyramid C*ce*E: C*d* and C*m* are by construction respectively half C*c* and CE; the parallelogram C*dom* will equal one-fourth C*ce*E. But since, for the solid content of the pyramid C*ce*E, we require to multiply the length by one-third of its base, the prism C*dom*, which is only one-fourth, will give us too small a result by one-twelfth.

In the second case we find, as formerly, the prism B'*p'd'*C' equal to the wedge



B'*b'c'*C', and remaining on the one hand the prism C'*d'o'm'*, and on the other the trapezoidal solid C'*c'*E', of which the cross section equidistant from either end is C'*d'o'm'*. Now, as before, the parallelogram C'*d'o'm'* is equal to one-fourth C'*c'e'*E'. But since the content of the trapezoidal solid C'*c'*E', of which the mid-section is C'*d'o'm'*, and the ends of which terminate on the lines C'*c'*, and C'E', is according to the trapezoidal formula $\frac{C'd'o'm' \times 4}{6}$, or two-thirds of the solid prism C'*d'o'm'*, we will have a result too large by one-third the solid content of it, or one-twelfth C'*c'e'*E'. In the first case, therefore, viz. where both height and base increase at the same end of the section, we must multiply the differences together, and divide them by 12, for an addition to the result; and in the second case, where the height and base increase at different ends, we must subtract the same. Upon this rule,

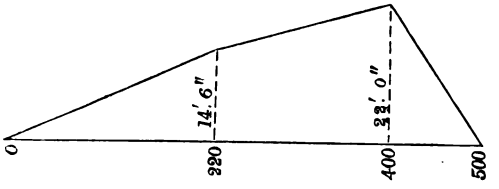
Supplementary Table (B) has been constructed; the results there obtained are in decimals of cubic yards per lineal foot, so that we have but to add or subtract according to the form which the irregular solid takes.

The manner in which this Table should be used will be shown in the calculation of the soft from the above section. It may be remarked here, that it is unnecessary in ordinary work to put down so many figures as are shown in these examples, which are detailed in order to avoid difficulty in properly understanding the application of the Tables. A simple mental addition of the numbers to be taken from the two columns in the Tables can always be made, and much time saved.

EXAMPLE:

Lengths of Section.	Bases and Numbers to be referred.	Page of Reference.	Number of Column.	Tabular Numbers and Results.	Cubic Yards.
50	(Base 16 feet) 7′.7½″	24	4	8·83	= 441·50
60	(Base 24 feet) 16′.4½″	48	2	29·45	
	(Base 24 feet) 1′.1½″	48	3	·02	
	(8 × 2¼) = 18′	95	2	·06	
				29·53	= 1,771·80
90	(Base 31 feet) 19′.1½″	72	2	42·28	
	(Base 31 feet) 1′.7½″	72	3	·05	
	(Base ½ foot) 19′.1½″	1	3	·35	
	(7 × 3¼) = 22¾′	95	2	·07	
				42·75	= 3,847·50
335	(Base 36 feet) 24′.0″	84	2	64·00	
	(Base 36 feet) 3′.3″	84	3	·19	
	(Base ¼ foot) 24′.0″	1	3	·22	
	(2½ × 6½) = 16¼′	95	2	·05	
				64·46	= 21,594·10
55	(Base 34 feet) 23′.6″	78	2	60·27	
	(Base 34 feet) 3′.9″	78	3	·26	
	(Base ½ foot) 23′.6″	1	3	·44	
	(6 × 7½) = 45′	95	2	·14	
				61·11	= 3,361·05
220	(Base 30 feet) 20′.4½″	68	7	45·70	
	(Base 30 feet) 0′.7½″	68	3	·01	
	(Base ½ foot) 20′.4½″	1	3	·38	
	− (2 × 1¼) = − 2½	95	2	− ·01	
				46·08	= 10,137·60
140	(Base 24 feet) 10′.6″	48	4	17·50	
	(Base ¾ foot) 10′.6″	1	3	·29	
	(9½ × 21) = 199½′	95	8	·62	
				18·41	= 2,577·40
					43,730·95 total cubic yards of soft material in cutting on top of rock.

If we take the slope of the soft material to be $1\frac{1}{4}$ to 1 instead of $1\frac{1}{2}$ to 1, then the first columns of the divisions headed 1 to 1 in the Tables of Bases are to be referred to first; secondly, must be added the number corresponding with the same average height taken from the columns headed 'Slopes only, $\frac{1}{4}$ to 1,' in the Supplementary Table (A); and thirdly, refer half the difference of the heights to the column $1\frac{1}{4}$ to 1, also to be found in Supplementary Table (A). And if any other intermediate $\frac{1}{4}$ to 1 slope be required, the information necessary for the calculation of it will be similarly obtained by referring to the different columns in Table (A), which are marked according to the slopes. It may be remarked, moreover, that a cutting with vertical sides may also be calculated in this way; that is, by deducting the number under heading 'Slopes $\frac{1}{4}$ to 1,' from the columns $\frac{1}{4}$ to 1 in the Tables of Bases; or the same calculation may be made with reference only to either one or other of the first two columns in Table (A) which are headed 'Bases only' (that is, without slopes), and upon obtaining the cubic content of a cutting or embankment for one foot or half a foot in breadth, a simple multiplication will give the content required. In order duly to provide for the accuracy of such a result, these two columns have been carried to four decimal places, which will therefore allow their numbers to be multiplied as much as one hundred times without appreciable error. If we have a cutting of solid rock, or whose sides are intended to be supported vertically by retaining walls, with a breadth, we may suppose, of 25 feet, the other dimensions being according to the accompanying section; we may take it in either of the following ways:—



(1.) From Table XX. and Supplementary Table (A), $\frac{1}{4}$ to 1 column:—

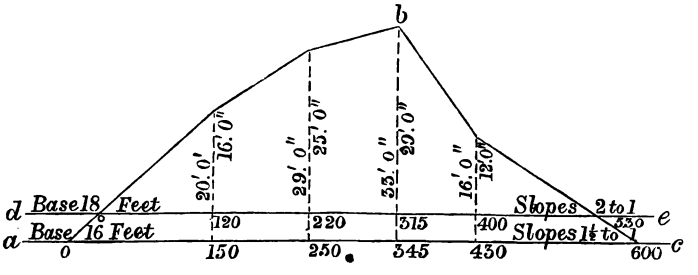
	Cubic yards.
$220 \times (7{\cdot}20 - {\cdot}49) =$	$6{\cdot}71 = 1{,}476{\cdot}2$
$180 \times (19{\cdot}98 - 3{\cdot}08) =$	$16{\cdot}90 = 3{,}042{\cdot}0$
$100 \times (11{\cdot}31 - 1{\cdot}12) =$	$10{\cdot}19 = 1{,}019{\cdot}0$
	$5{,}537{\cdot}2$, cubic yards.

Or (2.) From Table (A) 'Base only, 1 foot broad' column:—

$220 \times {\cdot}2685 =$	$59{\cdot}07$
$180 \times {\cdot}6760 =$	$121{\cdot}68$
$100 \times {\cdot}4074 =$	$40{\cdot}74$
	$221{\cdot}49$, and $\times 25 = 5537{\cdot}25$ cubic yards.

The third column in Supplementary Table (A) is also carried to four decimal places in order that it may be multiplied to provide for any slope, however flat, without error, and used along with the two preceding columns of bases. Any base to any slope not obtained in the Tables of Bases, may be therefore readily enough obtained by reference to this Table. It may be noticed that the two pages of this Table (numbered 1 and 94) have been so arranged as to be read in conjunction with the other Tables with the greatest facility, and without turning over any leaves.

But besides the uses already described to which these Tables may be put, it will be readily seen that they will be advantageous in the direct calculation of differences between cuttings or embankments, due to the raising or lowering of the formation level; to the alteration of the slopes, or of the breadth of base. An example will most readily explain this: Let us suppose that in the accompanying section, we wish to raise the formation level four feet, to alter the breadth of base from 16 to 18 feet, and to change the slopes by reducing the ratio from $1\frac{1}{2}$ to 1 to 2 to 1. The following calculations from the Tables will elucidate these remarks:—



			abc Cubic yards.	*dbe* Cubic yards.
Section *abc* 150 ×	13·33 =	1,999·5		
„ *dbe* 120 ×	11·65 =			1,398·0
„ *abc* 100 ×	48·24			
„ *dbe*	−45·30			
	2·94		294·0	
„ *abc* 95 ×	71·83			
„ *dbe*	−72·10			
	− ·27			25·6
„ *abc* 85 ×	49·20			
„ *dbe*	−46·58			
	2·62		222·7	
„ *abc* 170 ×	9·48		1·611·6	
„ *dbe* 130 ×	7·55			981·5
			4,127·8	−2,405·1 = 1722·7 ÷ *abc* − *dbe* in cubic yds.

Or if the gradient be supposed to be altered, and the altered heights taken in decimals of a foot at the divisions of the sections, the tabular numbers will be obtained by dividing proportionately the difference between the nearest two, and adding or subtracting the quotient to the nearest tabular number.

There are other uses to which these Tables may be put, such as the calculation of Dams, etc., when the ratio of the slopes, if differing on the opposite sides, must be averaged before the Tables are applied.

Where cross sections occur, and show the ground surface to have a transverse slope, they should be plotted as often as either the longitudinal or transverse slopes

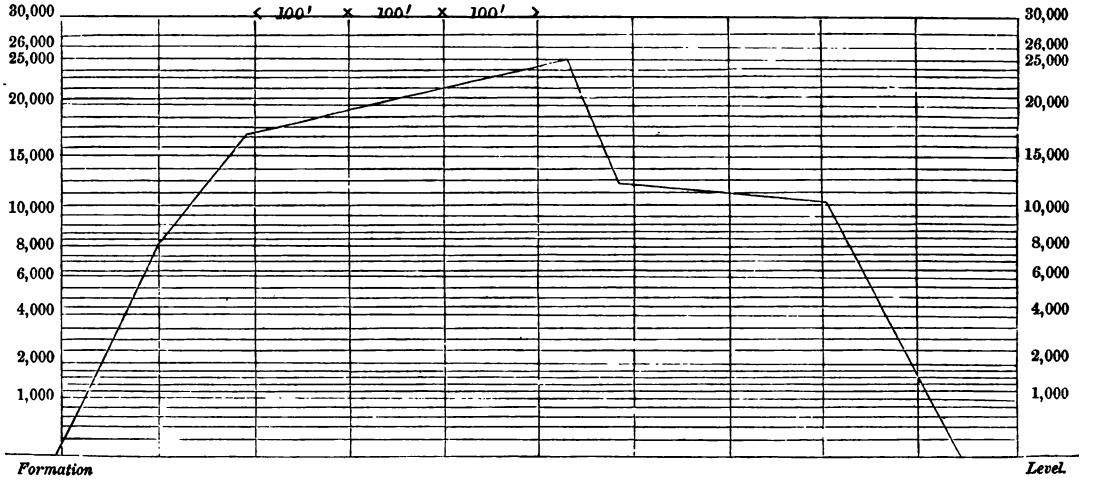
change. The practice of cross-sectioning at regular intervals, such as one hundred yards, or even one hundred feet, is too often adopted, and can never be satisfactory: in some cases the irregular contour of the ground calls for cross sections at distances much less than one hundred feet. The addition to the cubic contents of a cutting or embankment consequent on the transverse slope of ground is never better than an approximation; and to reduce the error as much as possible, the plotting of cross sections at every variation of ground is an absolute necessity. It may be remarked, moreover, that whenever they vary considerably between each interval, accuracy calls for the subdivision of the parts (triangular or other) into the elementary solids of which they are composed, viz. prisms, wedges, pyramids, or trapezoidal solids. Unless such accuracy be employed in dealing with the cross sections, it will be unnecessary to calculate with three decimals, as in the Tables, even although the cuttings and embankments be low and straggling, in which case the last decimal has the greatest comparative influence. And in deep cuttings, such as that which forms our first example, if the cross section be supposed irregular and steep, the employment of one decimal only will be sufficient.

TABLE XXXVI.

This Table is not intended for direct reference as the others are, but supplies data which will enable the calculator to construct tracing papers, whereby he may roughly and rapidly measure earthwork without previous calculation from the formula. This formula generally expressed is $\frac{L \times x(Sx + B)}{C \times 27}$, where x is the height required; L, the lengths of the divisions or spaces marked off by vertical lines on the tracing papers; S, the ratio of the side slopes; B, the breadth of base; and C, the cubic content. It may be noticed that this is the converse of the first of the prismoidal formulæ; that whereas formerly we had the heights given to find the cubic content, now we have the latter to find the former. In consequence, however, of the non-possibility of introducing a disturbing element, such as the second prismoidal formula, or rather the converse of it, upon a surface marked with fixed lines, an unavoidable error (independent of the roughness of the process) occurs whenever the surface of the ground is sloped at a considerable angle, such as at the ends of cuttings and embankments. This error, however, we have already seen to be neither so great nor so irregular as to prevent the useful application of the present Formula and Table, in the manner which is shown in the accompanying diagram. We will take, for the sake of comparison, the same section as in our first example, with the base and slopes also the same, viz. 16 feet, and $1\frac{1}{2}$ to 1; the scales being those usually employed for a working section, viz. 200 feet to an inch horizontal, and 30 feet to an inch vertical.

The tabular numbers give, in feet and decimals of a foot, the heights at which the horizontal lines are drawn above the formation level; the vertical lines one hundred feet apart divide the intermediate spaces into superficial areas, which represent, when placed upon the section, the numbers of cubic yards contained in the cutting or embankment, which numbers will be found in the first column of the Table corresponding with their respective heights. Some of these must be marked on the lines which are drawn horizontally (in red or blue to distinguish them in the body of the section from the other lines), as will be seen by reference to the diagram.

The cubic yards for each division or space are in the example marked underneath, in order that the method of measurement may be the more readily understood; and being added together, produce a total result differing from the true result formerly



2,700 + 12,400 + 18,500 + 20,600 + 23,400 + 19,450 + 12,100 + 10,500 + 5,900 + 250
= 125,800 total cubic yards by this method.

obtained as much as one and a half *per cent.* It must be observed, however, that this is an example which, although very suitable as a test of the practicability, is not fair as a sufficient illustration of the usefulness of this method of measurement; the great height and shortness of the cutting presenting sloping surfaces which, to the same extent, seldom occur in practice, and which not only much increase the error, but also increase the difficulty. If common tracing paper be used in the manner described, a sheet of drawing paper should be kept with the Tables already plotted, so as to save the replotting as the papers wear or are destroyed. The columns in the Table are all calculated to the commonest slope, viz. 1½ to 1; but if heights for other slopes be required, by calculating according to the formula given above, numbers will be found which will correspond with the terms required, and may be applied in a similar manner to those in the Table.

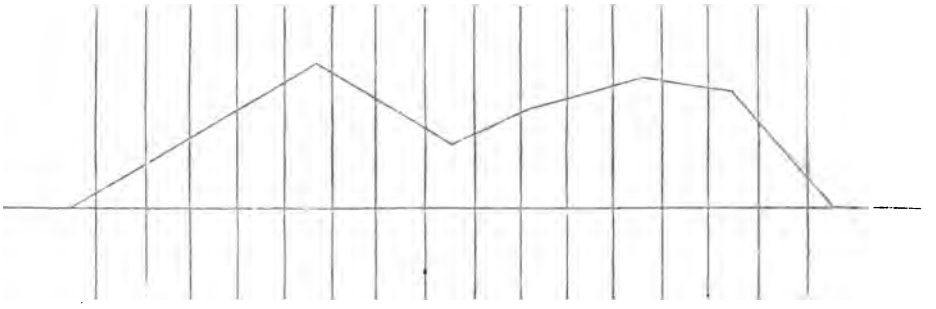
TABLES XXXVII. AND XXXVIII.

These Tables are intended for the calculation of land directly from the section. There are four things upon which the quantity of land may be said in a certain length of line to depend:—1*st*, Upon the breadth of roadway; 2*d*, the space left between the top or bottom of slopes and the fences; 3*d*, the ratio of the side slopes; and 4*th*, the transverse slope of the ground.

The first two may be added together as an unvarying breadth, and on reference to the Table, the number obtained will be decimals of an acre for 100 lineal feet; multiplying the decimal by the number of hundreds of feet in the length of section, we will obtain the acreage required for this breadth.

The third consideration, viz. the ratio of the side slopes, may be taken by adding the two heights at the end of every hundred feet, and referring their summation to the Table; or we may obtain this sum more rapidly by means of tracing paper divided by vertical lines at fifty feet distances, and adding the heights of these lines by the use of compasses for a total height, for reference likewise to the Table. The tabular number obtained by either of these methods is to be multiplied by the ratio of the slope. If, however, transverse slopes of ground occur, this multiplier must be increased, and according as the transverse slope increases will the quantity of required land be increased. This increase will be found directly from the subsidiary Table, which gives the altered multipliers according to the side and transverse slopes in the marginal columns, and facilitates the calculations to obtain the increased acreage.

An example will best show the use of these Tables. Let the base be taken at 27 feet; the distances between the top or bottom of the slopes and the fencing equal to five feet on each side; together, 37 feet of fixed breadth: the side slopes at $2\frac{1}{2}$ to 1; the transverse slopes at 1 in 7; and the section according to the diagram, which is to the same working scale as before, viz. 200 feet horizontal, and 30 feet vertical.



EXAMPLE:

Base and Heights.	Tabular Numbers.	Multipliers.	Results.
37	·0849	$\frac{800}{100}$	·6792
$217\frac{1}{2}$	·4592 ·0402	2·852	1·4243
			2·1035
= Total acreage (English) required.			

The total height, viz. $217\frac{1}{2}$, gives first ·4592, which will be found corresponding to the height of 200, while ·0402 corresponds to $17\frac{1}{2}$ feet; the multiplier has ·352 added to the 2·5, which is due to the transverse slope of 1 in 7, increasing the area occupied to this additionally proportionate extent.

TABLES XXXIX. AND XL.

These Tables are added to assist the engineer in calculations of results due to the combined effects of friction or resistance on different sorts of level roads, and

those due to gravity upon various inclines; the simple addition of the draught *per* ton to the gravity *per* ton, will give data from which, knowing the power of traction, the gross weight of a waggon or train may be found which can, in ordinary weather, be dragged up an incline. The Table of Resistances is chiefly obtained from Sir John MacNeill's experiments upon the London and Shrewsbury Road; the resistance upon rails, viz. 10 lbs. *per* ton, is gathered from numerous experiments, and seems to be the average result if spread over an ordinary train, the friction being somewhat more proportionately in a locomotive than in a waggon or carriage.

Supplementary Table (A.) For other Bases and

Depths in feet.	Bases only.		Slopes only.	Add half difference of Heights have Slopes of—				
	One foot broad.	Half foot broad.	¼ to 1	½ to 1	¾ to 1	1¼ to 1	1¾ to 1	2
½	·0185	·0093	·0023	·002	·002	·004	·005	
1	·0370	·0185	·0093	·006	·009	·015	·022	
1½	·0556	·0278	·0208	·014	·021	·035	·049	
2	·0741	·0370	·0370	·025	·037	·062	·087	
2½	·0927	·0463	·0579	·039	·058	·097	·136	
3	·1111	·0556	·0833	·056	·083	·139	·195	
3½	·1296	·0648	·1134	·076	·113	·189	·265	
4	·1481	·0741	·1481	·099	·148	·247	·346	
4½	·1667	·0833	·1875	·125	·187	·312	·437	
5	·1852	·0927	·2315	·154	·231	·385	·540	
5½	·2037	·1018	·2801	·187	·280	·467	·654	
6	·2222	·1111	·3333	·222	·333	·556	·778	
6½	·2407	·1204	·3912	·261	·391	·652	·913	
7	·2593	·1296	·4537	·302	·454	·756	1·058	
7½	·2778	·1389	·5208	·347	·521	·868	1·215	
8	·2963	·1481	·5926	·395	·593	·988	1·383	
8½	·3148	·1574	·6690	·446	·669	1·115	1·561	
9	·3333	·1667	·7500	·500	·750	1·250	1·750	
9½	·3518	·1759	·8356	·557	·836	1·393	1·950	
10	·3704	·1852	·9259	·617	·926	1·543	2·161	
10½	·3889	·1944	1·0208	·681	1·021	1·702	2·383	
11	·4074	·2037	1·1204	·747	1·120	1·867	2·614	
11½	·4259	·2130	1·2245	·816	1·224	2·040	2·857	
12	·4444	·2222	1·3333	·889	1·333	2·222	3·111	
12½	·4630	·2315	1·4467	·964	1·447	2·411	3·376	
13	·4815	·2407	1·5648	1·043	1·565	2·608	3·651	
13½	·5000	·2500	1·6875	1·125	1·687	2·812	3·937	
14	·5185	·2593	1·8148	1·210	1·815	3·025	4·235	
14½	·5370	·2685	1·9468	1·298	1·947	3·245	4·543	
15	·5556	·2778	2·0833	1·389	2·083	3·472	4·861	
15½	·5741	·2870	2·2245	1·483	2·224	3·707	5·190	
16	·5926	·2963	2·3704	1·580	2·370	3·950	5·530	
16½	·6111	·3056	2·5208	1·681	2·521	4·202	5·883	
17	·6296	·3148	2·6759	1·784	2·676	4·460	6·244	
17½	·6481	·3241	2·8356	1·890	2·836	4·726	6·617	
18	·6667	·3333	3·0000	2·000	3·000	5·000	7·000	
18½	·6852	·3426	3·1690	2·113	3·169	5·282	7·395	
19	·7037	·3518	3·3426	2·228	3·343	5·571	7·799	
19½	·7222	·3611	3·5208	2·347	3·521	5·868	8·215	
20	·7407	·3704	3·7037	2·469	3·704	6·173	8·642	
20½	·7593	·3796	3·8912	2·594	3·891	6·485	9·079	
21	·7778	·3889	4·0833	2·722	4·083	6·805	9·527	
21½	·7963	·3981	4·2801	2·853	4·280	7·133	9·986	
22	·8148	·4074	4·4815	2·988	4·481	7·470	10·458	
22½	·8333	·4167	4·6875	3·125	4·687	7·812	10·937	
23	·8518	·4259	4·8981	3·265	4·898	8·163	11·428	
23½	·8704	·4352	5·1134	3·409	5·113	8·522	11·931	
24	·8889	·4444	5·3333	3·556	5·333	8·889	12·444	
24½	·9074	·4537	5·5579	3·705	5·558	9·263	12·969	
25	·9259	·4630	5·7870	3·858	5·787	9·645	13·503	
25½	·9444	·4722	6·0208	4·014	6·021	10·035	14·049	
26	·9630	·4815	6·2593	4·173	6·259	10·432	14·605	
26½	·9815	·4907	6·5023	4·335	6·502	10·837	15·172	
27	1·0000	·5000	6·7500	4·500	6·750	11·250	15·750	
27½	1·0185	·5093	7·0023	4·668	7·002	11·670	16·338	
28	1·0370	·5185	7·2593	4·839	7·259	12·098	16·937	
28½	1·0556	·5278	7·5208	5·014	7·521	12·535	17·549	
29	1·0741	·5370	7·7870	5·191	7·787	12·978	18·169	
29½	1·0927	·5463	8·0579	5·372	8·058	13·430	18·802	
30	1·1111	·5556	8·3333	5·556	8·333	13·889	19·444	

TABLES.

TABLE I.—Base 6 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·125	·004	·130	·005	·120	·003	·113	·001	½
1	·278	·018	·296	·024	·259	·012	·231	·003	1
1½	·458	·042	·500	·056	·417	·028	·354	·007	1½
2	·667	·074	·741	·099	·593	·049	·481	·012	2
2½	·903	·116	1·019	·155	·787	·077	·613	·019	2½
3	1·167	·167	1·333	·222	1·000	·111	·750	·028	3
3½	1·458	·227	1·685	·303	1·231	·151	·891	·039	3½
4	1·778	·296	2·074	·395	1·481	·197	1·037	·049	4
4½	2·125	·375	2·500	·500	1·750	·250	1·187	·062	4½
5	2·500	·463	2·963	·617	2·037	·309	1·343	·077	5
5½	2·903	·560	3·463	·747	2·343	·374	1·502	·093	5½
6	3·333	·667	4·000	·889	2·667	·444	1·667	·111	6
6½	3·792	·782	4·574	1·044	3·009	·522	1·836	·130	6½
7	4·278	·907	5·185	1·209	3·370	·605	2·009	·151	7
7½	4·792	1·042	5·833	1·389	3·750	·695	2·187	·174	7½
8	5·333	1·185	6·519	1·580	4·148	·790	2·370	·197	8
8½	5·903	1·338	7·241	1·784	4·565	·892	2·558	·223	8½
9	6·500	1·500	8·000	2·000	5·000	1·000	2·750	·250	9
9½	7·125	1·672	8·796	2·229	5·454	1·115	2·947	·279	9½
10	7·778	1·852	9·630	2·470	5·926	1·235	3·148	·309	10
10½	8·458	2·042	10·500	2·723	6·417	1·361	3·354	·340	10½
11	9·167	2·241	11·407	2·988	6·926	1·494	3·565	·373	11
11½	9·903	2·449	12·352	3·265	7·454	1·633	3·780	·408	11½
12	10·667	2·667	13·333	3·556	8·000	1·778	4·000	·444	12
12½	11·458	2·894	14·352	3·859	8·565	1·929	4·225	·482	12½
13	12·278	3·129	15·407	4·173	9·148	2·086	4·454	·521	13
13½	13·125	3·375	16·500	4·500	9·750	2·250	4·687	·562	13½
14	14·000	3·630	17·630	4·839	10·370	2·419	4·926	·605	14
14½	14·903	3·894	18·796	5·191	11·009	2·596	5·169	·649	14½
15	15·833	4·167	20·000	5·556	11·667	2·778	5·417	·694	15
15½	16·792	4·449	21·241	5·933	12·343	2·966	5·669	·741	15½
16	17·778	4·741	22·519	6·321	13·037	3·161	5·926	·790	16
16½	18·792	5·042	23·833	6·723	13·750	3·361	6·187	·840	16½
17	19·833	5·352	25·185	7·136	14·481	3·568	6·454	·892	17
17½	20·903	5·671	26·574	7·562	15·231	3·781	6·725	·945	17½
18	22·000	6·000	28·000	8·000	16·000	4·000	7·000	1·000	18
18½	23·125	6·338	29·463	8·451	16·787	4·225	7·280	1·056	18½
19	24·278	6·685	30·963	8·913	17·593	4·457	7·565	1·114	19
19½	25·458	7·042	32·500	9·389	18·417	4·695	7·854	1·174	19½
20	26·667	7·407	34·074	9·877	19·259	4·939	8·148	1·235	20
20½	27·903	7·782	35·685	10·377	20·120	5·188	8·447	1·297	20½
21	29·167	8·167	37·333	10·889	21·000	5·444	8·750	1·361	21
21½	30·458	8·560	39·019	11·413	21·898	5·707	9·058	1·427	21½
22	31·778	8·963	40·741	11·951	22·815	5·975	9·370	1·494	22
22½	33·125	9·375	42·500	12·500	23·750	6·250	9·687	1·562	22½
23	34·500	9·796	44·296	13·061	24·704	6·531	10·009	1·633	23
23½	35·903	10·227	46·130	13·636	25·676	6·818	10·336	1·705	23½
24	37·333	10·667	48·000	14·222	26·667	7·111	10·667	1·778	24
24½	38·792	11·116	49·907	14·821	27·676	7·411	11·002	1·853	24½
25	40·278	11·574	51·852	15·432	28·704	7·716	11·342	1·929	25
25½	41·792	12·042	53·833	16·056	29·750	8·028	11·687	2·007	25½
26	43·333	12·518	55·852	16·691	30·815	8·347	12·037	2·086	26
26½	44·903	13·004	57·907	17·339	31·898	8·670	12·391	2·167	26½
27	46·500	13 500	60·000	18 000	33·000	9·000	12·750	2·250	27
27½	48·125	14·004	62·130	18·672	34·120	9·336	13·113	2·334	27½
28	49·778	14·518	64·296	19·357	35·259	9·679	13·481	2·420	28
28½	51·458	15·042	66·500	20·056	36·417	10·028	13·854	2·507	28½
29	53·167	15·574	68·741	20·765	37·593	10·383	14·231	2·596	29
29½	54·903	16·116	71·019	21·488	38·787	10·744	14·613	2·686	29½
30	56·667	16·667	73·333	22·222	40·000	11·111	15·000	2·778	30

TABLE II.—Base 7 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·144	·004	·148	·005	·139	·003	·132	·001	½
1	·315	·018	·333	·024	·296	·012	·268	·003	1
1½	·514	·042	·556	·056	·472	·028	·410	·007	1½
2	·741	·074	·815	·099	·667	·049	·556	·012	2
2½	·995	·116	1·111	·155	·880	·077	·706	·019	2½
3	1·278	·167	1·444	·222	1·111	·111	·861	·028	3
3½	1·588	·227	1·815	·303	1·361	·151	1·021	·039	3½
4	1·926	·296	2·222	·395	1·630	·197	1·185	·049	4
4½	2·292	·375	2·667	·500	1·917	·250	1·354	·062	4½
5	2·685	·463	3·148	·617	2·222	·309	1·528	·077	5
5½	3·106	·560	3·667	·747	2·546	·374	1·706	·093	5½
6	3·556	·667	4·222	·889	2·889	·444	1·889	·111	6
6½	4·032	·782	4·815	1·044	3·250	·522	2·076	·130	6½
7	4·537	·907	5·444	1·209	3·630	·605	2·268	·151	7
7½	5·069	1·042	6·111	1·389	4·028	·695	2·465	·174	7½
8	5·630	1·185	6 815	1·580	4·444	·790	2·667	·197	8
8½	6·218	1·338	7·556	1·784	4·880	·892	2·873	·223	8½
9	6·833	1·500	8·333	2·000	5·333	1·000	3·083	·250	9
9½	7·477	1·672	9·148	2·229	5·806	1·115	3·299	·279	9½
10	8·148	1·852	10·000	2·470	6·296	1·235	3·518	·309	10
10½	8·847	2·042	10·889	2·723	6·806	1·361	3·743	·340	10½
11	9·574	2·241	11·815	2·988	7·333	1·494	3·972	·373	11
11½	10·329	2·449	12·778	3·265	7·880	1·633	4·206	·408	11½
12	11·111	2·667	13·778	3·556	8·444	1·778	4·444	·444	12
12½	11·921	2·894	14·815	3·859	9·028	1·929	4·687	·482	12½
13	12·759	3·129	15·889	4·173	9·630	2·086	4·935	·521	13
13½	13·625	3·375	17·000	4·500	10·250	2·250	5·187	·562	13½
14	14·519	3·630	18·148	4·839	10·889	2·419	5·444	·605	14
14½	15·440	3·894	19·333	5·191	11·546	2·596	5·706	·649	14½
15	16·389	4·167	20·556	5·556	12·222	2·778	5·972	·694	15
15½	17·366	4·449	21·815	5·933	12·917	2·966	6·243	·741	15½
16	18·370	4·741	23·111	6·321	13·630	3·161	6·518	·790	16
16½	19·403	5·042	24·444	6·723	14·361	3·361	6·799	·840	16½
17	20·463	5·352	25·815	7·136	15·111	3·568	7·083	·892	17
17½	21·551	5·671	27·222	7·562	15·880	3·781	7·373	·945	17½
18	22·667	6·000	28·667	8·000	16·667	4·000	7·666	1·000	18
18½	23·810	6·338	30·148	8·451	17·472	4·225	7·965	1·056	18½
19	24·981	6·685	31·667	8·913	18·296	4·457	8·268	1·114	19
19½	26·181	7·042	33·222	9·389	19·139	4·695	8·576	1·174	19½
20	27·407	7·407	34·815	9·877	20·000	4·939	8·889	1·235	20
20½	28·662	7·782	36·444	10·377	20·880	5·188	9·206	1·297	20½
21	29·944	8·167	38·111	10·889	21·778	5·444	9·528	1·361	21
21½	31·255	8·560	39·815	11·413	22·694	5·707	9·854	1·427	21½
22	32·593	8·963	41·556	11·951	23·630	5·975	10·185	1·494	22
22½	33·958	9·375	43·333	12·500	24·583	6·250	10·521	1·562	22½
23	35·352	9·796	45·148	13·061	25·556	6·531	10·861	1·633	23
23½	36·773	10·227	47·000	13·636	26·546	6·818	11·206	1·705	23½
24	38·222	10·667	48·889	14·222	27·556	7·111	11·556	1·778	24
24½	39·699	11·116	50·815	14·821	28·583	7·411	11·910	1·853	24½
25	41·204	11·574	52·778	15·432	29·630	7·716	12·268	1·929	25
25½	42·736	12·042	54·778	16·056	30·694	8·028	12·632	2·007	25½
26	44·296	12·518	56·815	16·691	31·778	8·347	13·000	2·086	26
26½	45·884	13·004	58·889	17·339	32·880	8·670	13·373	2·167	26½
27	47·500	13·500	61·000	18·000	34·000	9·000	13·750	2·250	27
27½	49·144	14·004	63·148	18·672	35·139	9·336	14·132	2·334	27½
28	50·815	14·518	65·333	19·357	36·296	9·679	14·518	2·420	28
28½	52·514	15·042	67·556	20·056	37·472	10·028	14·910	2·507	28½
29	54·241	15·574	69·815	20·765	38·667	10·383	15·306	2·596	29
29½	55·995	16·116	72·111	21·488	39·880	10·744	15·706	2·686	29½
30	57·778	16·667	74·444	22·222	41·111	11·111	16·111	2·778	30

TABLE III.—Base 8 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·162	·004	·167	·005	·157	·003	·150	·001	½
1	·352	·018	·370	·024	·333	·012	·306	·003	1
1½	·569	·042	·611	·056	·528	·028	·465	·007	1½
2	·815	·074	·889	·099	·741	·049	·630	·012	2
2½	1·088	·116	1·204	·155	·972	·077	·799	·019	2½
3	1·389	·167	1·556	·222	1·222	·111	·972	·028	3
3½	1·718	·227	1·944	·303	1·491	·151	1·150	·039	3½
4	2·074	·296	2·370	·395	1·778	·197	1·333	·049	4
4½	2·458	·375	2·833	·500	2·083	·250	1·521	·062	4½
5	2·870	·463	3·333	·617	2·407	·309	1·713	·077	5
5½	3·310	·560	3·870	·747	2·750	·374	1·910	·093	5½
6	3·778	·667	4·444	·889	3·111	·444	2·111	·111	6
6½	4·273	·782	5·056	1·044	3·491	·522	2·317	·130	6½
7	4·796	·907	5·704	1·209	3·889	·605	2·528	·151	7
7½	5·347	1·042	6·389	1·389	4·306	·695	2·743	·174	7½
8	5·926	1·185	7·111	1·580	4·741	·790	2·963	·197	8
8½	6·532	1·338	7·870	1·784	5·194	·892	3·187	·223	8½
9	7·167	1·500	8·667	2·000	5·667	1·000	3·417	·250	9
9½	7·829	1·672	9·500	2·229	6·157	1·115	3·650	·279	9½
10	8·519	1·852	10·370	2·470	6·667	1·235	3·889	·309	10
10½	9·236	2·042	11·278	2·723	7·194	1·361	4·132	·340	10½
11	9·981	2·241	12·222	2·988	7·741	1·494	4·380	·373	11
11½	10·755	2·449	13·204	3·265	8·306	1·633	4·632	·408	11½
12	11·556	2·667	14·222	3·556	8·889	1·778	4·899	·444	12
12½	12·384	2·894	15·278	3·859	9·491	1·929	5·150	·482	12½
13	13·241	3·129	16·370	4·173	10·111	2·086	5·417	·521	13
13½	14·125	3·375	17·500	4·500	10·750	2·250	5·687	·562	13½
14	15·037	3·630	18·667	4·839	11·407	2·419	5·963	·605	14
14½	15·977	3·894	19·870	5·191	12·083	2·596	6·243	·649	14½
15	16·944	4·167	21·111	5·556	12·778	2·778	6·528	·694	15
15½	17·940	4·449	22·389	5·933	13·491	2·966	6·817	·741	15½
16	18·963	4·741	23·704	6·321	14·222	3·161	7·111	·790	16
16½	20·014	5·042	25·056	6·723	14·972	3·361	7·410	·840	16½
17	21·093	5·352	26·444	7·136	15·741	3·568	7·713	·892	17
17½	22·199	5·671	27·870	7·562	16·528	3·781	8·021	·945	17½
18	23·333	6·000	29·333	8·000	17·333	4·000	8·333	1·000	18
18½	24·495	6·338	30·833	8·451	18·157	4·225	8·650	1·056	18½
19	25·685	6·685	32·370	8·913	19·000	4·457	8·972	1·114	19
19½	26 903	7·042	33·944	9·389	19·861	4·695	9·299	1·174	19½
20	28 148	7·407	35·556	9·877	20·741	4·939	9·630	1·235	20
20½	29 421	7·782	37·204	10·377	21·639	5·188	9·965	1·297	20½
21	30·722	8·167	38·889	10·889	22·556	5·444	10·306	1·361	21
21½	32·051	8·560	40·611	11·413	23·491	5·707	10·650	1·427	21½
22	33·407	8·963	42·370	11·951	24·444	5·975	11·000	1·494	22
22½	34·792	9·375	44·167	12·500	25·417	6·250	11·354	1·562	22½
23	36·204	9·796	46·000	13·061	26·407	6·531	11·713	1·633	23
23½	37·643	10·227	47·870	13·636	27·417	6·818	12·076	1·705	23½
24	39·111	10·667	49·778	14·222	28·444	7·111	12·444	1·778	24
24½	40·606	11·116	51·722	14·821	29·491	7·411	12·817	1·853	24½
25	42·130	11·574	53·704	15·432	30·556	7·716	13·194	1·929	25
25½	43·681	12·042	55·722	16·056	31·639	8·028	13·576	2·007	25½
26	45·259	12·518	57·778	16·691	32·741	8·347	13·963	2·086	26
26½	46·866	13·004	59·870	17·339	33·861	8·670	14·354	2·167	26½
27	48·500	13·500	62·000	18·000	35·000	9·000	14·750	2·250	27
27½	50·162	14·004	64·167	18·672	36·157	9·336	15·150	2·334	27½
28	51·852	14·518	66·370	19·357	37·333	9·679	15·556	2·420	28
28½	53·569	15·042	68·611	20·056	38·528	10·028	15·965	2·507	28½
29	55·315	15·574	70·889	20·765	39·741	10·383	16·380	2·596	29
29½	57·088	16·116	73·204	21·488	40·972	10·744	16·799	2·686	29½
30	58·889	16·667	75·556	22·222	42·222	11·111	17·222	2·778	30

TABLE IV.—Base 9 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·181	·004	·185	·005	·176	·003	·169	·001	½
1	·389	·018	·407	·024	·370	·012	·343	·003	1
1½	·625	·042	·667	·056	·583	·028	·521	·007	1½
2	·889	·074	·963	·099	·815	·049	·704	·012	2
2½	1·181	·116	1·296	·155	1·065	·077	·891	·019	2½
3	1·500	·167	1·667	·222	1·333	·111	1·083	·028	3
3½	1·847	·227	2·074	·303	1·620	·151	1·280	·039	3½
4	2·222	·296	2·519	·395	1·926	·197	1·481	·049	4
4½	2·625	·375	3·000	·500	2·250	·250	1·687	·062	4½
5	3·056	·463	3·519	·617	2·593	·309	1·898	·077	5
5½	3·514	·560	4·074	·747	2·954	·374	2·113	·093	5½
6	4·000	·667	4·667	·889	3·333	·444	2·333	·111	6
6½	4·514	·782	5·296	1·044	3·731	·522	2·558	·130	6½
7	5·056	·907	5·963	1·209	4·148	·605	2·787	·151	7
7½	5·625	1·042	6·667	1·389	4·583	·695	3·021	·174	7½
8	6·222	1·185	7·407	1·580	5·037	·790	3·259	·197	8
8½	6·847	1·338	8·185	1·784	5·509	·892	3·502	·223	8½
9	7·500	1·500	9·000	2·000	6·000	1·000	3·750	·250	9
9½	8·180	1·672	9·852	2·229	6·509	1·115	4·002	·279	9½
10	8·889	1·852	10·741	2·470	7·037	1·235	4·259	·309	10
10½	9·625	2·042	11·667	2·723	7·583	1·361	4·521	·340	10½
11	10·389	2·241	12·630	2·988	8·148	1·494	4·787	·373	11
11½	11·181	2·449	13·630	3·265	8·731	1·633	5·058	·408	11½
12	12·000	2·667	14·667	3·556	9·333	1·778	5·333	·444	12
12½	12·847	2·894	15·741	3·859	9·954	1·929	5·613	·482	12½
13	13·722	3·129	16·852	4·173	10·593	2·086	5·898	·521	13
13½	14·625	3·375	18·000	4·500	11·250	2·250	6·187	·562	13½
14	15·556	3·630	19·185	4·839	11·926	2·419	6·481	·605	14
14½	16·514	3·894	20·407	5·191	12·620	2·596	6·780	·649	14½
15	17·500	4·167	21·667	5·556	13·333	2·778	7·083	·694	15
15½	18·514	4·449	22·963	5·933	14·065	2·966	7·391	·741	15½
16	19·556	4·741	24·296	6·321	14·815	3·161	7·704	·790	16
16½	20·625	5·042	25·667	6·723	15·583	3·361	8·021	·840	16½
17	21·722	5·352	27·074	7·136	16·370	3·568	8·343	·892	17
17½	22·847	5·671	28·519	7·562	17·176	3·781	8·669	·945	17½
18	24·000	6·000	30·000	8·000	18·000	4·000	9·000	1·000	18
18½	25·180	6·338	31·519	8·451	18·843	4·225	9·336	1·056	18½
19	26·389	6·685	33·074	8·913	19·704	4·457	9·676	1·114	19
19½	27·625	7·042	34·667	9·389	20·583	4·695	10·021	1·174	19½
20	28·889	7·407	36·296	9·877	21·481	4·939	10·370	1·235	20
20½	30·181	7·782	37·963	10·377	22·398	5·188	10·725	1·297	20½
21	31·500	8·167	39·667	10·889	23·333	5·444	11·083	1·361	21
21½	32·847	8·560	41·407	11·413	24·287	5·707	11·447	1·427	21½
22	34·222	8·963	43·185	11·951	25·259	5·975	11·815	1·494	22
22½	35·625	9·375	45·000	12·500	26·250	6·250	12·187	1·562	22½
23	37·056	9·796	46·852	13·061	27·259	6·531	12·565	1·633	23
23½	38·514	10·227	48·741	13·636	28·287	6·818	12·947	1·705	23½
24	40·000	10·667	50·667	14·222	29·333	7·111	13·333	1·778	24
24½	41·514	11·116	52·630	14·821	30·398	7·411	13·725	1·853	24½
25	43·056	11·574	54·630	15·432	31·481	7·716	14·120	1·929	25
25½	44·625	12·042	56·667	16·056	32·583	8·028	14·521	2·007	25½
26	46·222	12·518	58·741	16·691	33·704	8·347	14·926	2·086	26
26½	47·847	13·004	60·852	17·339	34·843	8 670	15·336	2·167	26½
27	49·500	13·500	63·000	18·000	36·000	9·000	15·750	2·250	27
27½	51·181	14·004	65·185	18·672	37·176	9 336	16·169	2·334	27½
28	52·889	14·518	67·407	19·357	38·370	9·679	16·593	2·420	28
28½	54·625	15·042	69·667	20·056	39·583	10·028	17·021	2·507	28½
29	56·389	15·574	71·963	20·765	40·815	10·383	17·454	2·596	29
29½	58·181	16·116	74·296	21·488	42·065	10·744	17·891	2·686	29½
30	60·000	16·667	76·667	22·222	43·333	11·111	18·333	2·778	30

TABLE V.—Base 10 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·199	·004	·204	·005	·194	·003	·188	·001	½
1	·426	·018	·444	·024	·407	·012	·380	·003	1
1½	·681	·042	·722	·056	·639	·028	·576	·007	1½
2	·963	·074	1·037	·099	·889	·049	·778	·012	2
2½	1·273	·116	1·389	·155	1·157	·077	·984	·019	2½
3	1·611	·167	1·778	·222	1·444	·111	1·194	·028	3
3½	1·977	·227	2·204	·303	1·750	·151	1·410	·039	3½
4	2·370	·296	2·667	·395	2·075	·197	1·630	·049	4
4½	2·792	·375	3·167	·500	2·417	·250	1·854	·062	4½
5	3·241	·463	3·704	·617	2·778	·309	2·083	·077	5
5½	3·718	·560	4·278	·747	3·157	·374	2·317	·093	5½
6	4·222	·667	4·889	·889	3·556	·444	2·556	·111	6
6½	4·755	·782	5·537	1·044	3·972	·522	2·799	·130	6½
7	5·316	·907	6·222	1·209	4·407	·605	3·046	·151	7
7½	5·904	1·042	6·944	1·389	4·862	·695	3·299	·174	7½
8	6·520	1·185	7·704	1·580	5·333	·790	3·556	·197	8
8½	7·163	1·338	8·500	1·784	5·824	·892	3·817	·223	8½
9	7·833	1·500	9·333	2·000	6·333	1·000	4·083	·250	9
9½	8·533	1·672	10·204	2·229	6·862	1·115	4·354	·279	9½
10	9·260	1·852	11·111	2·470	7·407	1·235	4·630	·309	10
10½	10·014	2·042	12·056	2·723	7·972	1·361	4·910	·340	10½
11	10·796	2·241	13·036	2·988	8·556	1·494	5·195	·373	11
11½	11·606	2·449	14·056	3·265	9·157	1·633	5·484	·408	11½
12	12·444	2·667	15·111	3·556	9·778	1·778	5·778	·444	12
12½	13·310	2·894	16·204	3·859	10·417	1·929	6·076	·482	12½
13	14·204	3·129	17·333	4·173	11·075	2·086	6·380	·521	13
13½	15·125	3·375	18·500	4·500	11·750	2·250	6·688	·562	13½
14	16·074	3·630	19·704	4·839	12·444	2·419	7·000	·605	14
14½	17·051	3·894	20·944	5·191	13·157	2·596	7·317	·649	14½
15	18·056	4·167	22·222	5·556	13·889	2·778	7·639	·694	15
15½	19·088	4·449	23·537	5·933	14·639	2·966	7·965	·741	15½
16	20·149	4·741	24·889	6·321	15·407	3·161	8·296	·790	16
16½	21·236	5·042	26·278	6·723	16·194	3·361	8·632	·840	16½
17	22·352	5·352	27·704	7·136	17·000	3·568	8·972	·892	17
17½	23·496	5·671	29·167	7·562	17·824	3·781	9·317	·945	17½
18	24·667	6·000	30·667	8·000	18·667	4·000	9·667	1·000	18
18½	25·866	6·338	32·204	8·451	19·528	4·225	10·021	1·056	18½
19	27·093	6·685	33·778	8·913	20·407	4·457	10·380	1·114	19
19½	28·347	7·042	35·389	9·389	21·306	4·695	10·743	1·174	19½
20	29·630	7·407	37·037	9·877	22·222	4·939	11·111	1·235	20
20½	30·940	7·782	38·722	10·377	23·157	5·188	11·484	1·297	20½
21	32·278	8·167	40·444	10·889	24·111	5·444	11·861	1·361	21
21½	33·644	8·560	42·204	11·413	25·083	5·707	12·243	1·427	21½
22	35·037	8·963	44·000	11·951	26·074	5·975	12·630	1·494	22
22½	36·458	9·375	45·833	12·500	27·083	6·250	13·021	1·562	22½
23	37·907	9·796	47·704	13·061	28·111	6·531	13·417	1·633	23
23½	39·384	10·227	49·611	13·636	29·157	6·818	13·817	1·705	23½
24	40·889	10·667	51·556	14·222	30·222	7·111	14·222	1·778	24
24½	42·420	11·116	53·536	14·821	31·306	7·411	14·632	1·853	24½
25	43·980	11·574	55·556	15·432	32·407	7·716	15·046	1·929	25
25½	45·568	12·042	57·611	16·056	33·528	8·028	15·465	2·007	25½
26	47·185	12·518	59·704	16·691	34·667	8·347	15·889	2·086	26
26½	48·828	13·004	61·833	17·339	35·824	8·670	16·317	2·167	26½
27	50·500	13·500	64·000	18·000	37·000	9·000	16·750	2·250	27
27½	52·199	14·004	66·204	18·672	38·194	9·336	17·188	2·334	27½
28	53·925	14·518	68·444	19·357	39·407	9·679	17·630	2·420	28
28½	55·680	15·042	70·722	20·056	40·639	10·028	18·076	2·507	28½
29	57·463	15·574	73·037	20·765	41·889	10·383	18·528	2·596	29
29½	59·272	16·116	75·389	21·488	43·157	10·744	18·984	2·686	29½
30	61·111	16·667	77·778	22·222	44·444	11·111	19·444	2·778	30

TABLE V.—Base 10 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
30½	62·977	17·227	80·204	22·970	45·750	11·485	19·910	2·871	30½
31	64·870	17·796	82·667	23·728	47·075	11·864	20·380	2·966	31
31½	66·792	18·375	85·167	24·500	48·417	12·250	20·854	3·062	31½
32	68·740	18·963	87·704	25·284	49·778	12·642	21·333	3·160	32
32½	70·717	19·560	90·278	26·080	51·157	13·040	21·817	3·260	32½
33	72·722	20·167	92·889	26·889	52·556	13·444	22·306	3·361	33
33½	74·753	20·782	95·537	27·709	53·972	13·855	22·799	3·464	33½
34	76·815	21·407	98·222	28·543	55·407	14·272	23·296	3·568	34
34½	78·903	22·042	100·944	29·389	56·862	14·694	23·799	3·674	34½
35	81·019	22·685	103·704	30·247	58·333	15·123	24·306	3·781	35
35½	83·162	23·338	106·500	31·117	59·824	15·559	24·817	3·890	35½
36	85·333	24·000	109·333	32·000	61·333	16·000	25·333	4·000	36
36½	87·532	24·671	112·204	32·895	62·862	16·447	25·854	4·112	36½
37	89·759	25·352	115·111	33·802	64·407	16·901	26·380	4·225	37
37½	92·014	26·042	118·056	34·722	65·972	17·361	26·910	4·340	37½
38	94·296	26·741	121·036	35·654	67·556	17·827	27·444	4·457	38
38½	96·606	27·449	124·056	36·599	69·157	18·299	27·984	4·575	38½
39	98·944	28·167	127·111	37·556	70·778	18·778	28·528	4·694	39
39½	101·309	28·894	130·204	38·525	72·417	19·263	29·076	4·816	39½
40	103·704	29·630	133·333	39·506	74·075	19·753	29·630	4·938	40
40½	106·125	30·375	136·500	40·500	75·750	20·250	30·187	5·062	40½
41	108·574	31·129	139·704	41·506	77·444	20·753	30·750	5·188	41
41½	111·051	31·894	142·944	42·525	79·157	21·263	31·317	5·316	41½
42	113·556	32·667	146·222	43·556	80·889	21·778	31·889	5·444	42
42½	116·087	33·449	149·537	44·599	82·639	22·299	32·465	5·575	42½
43	118·648	34·241	152·889	45·654	84·407	22·827	33·046	5·707	43
43½	121·236	35·042	156·278	46·722	86·194	23·361	33·632	5·840	43½
44	123·853	35·852	159·704	47·802	88·000	23·901	34·222	5·975	44
44½	126·496	36·671	163·167	48·895	89·824	24·447	34·817	6·112	44½
45	129·167	37·500	166·667	50·000	91·667	25·000	35·417	6·250	45
45½	131·865	38·338	170·204	51·117	93·528	25·559	36·021	6·390	45½
46	134·593	39·185	173·778	52·247	95·407	26·123	36·630	6·531	46
46½	137·347	40·042	177·389	53·389	97·306	26·694	37·243	6·673	46½
47	140·130	40·907	181·037	54·543	99·222	27·272	37·861	6·818	47
47½	142·940	41·782	184·722	55·709	101·157	27·855	38·484	6·964	47½
48	145·778	42·667	188·444	56·889	103·111	28·444	39·111	7·111	48
48½	148·644	43·560	192·204	58·080	105·083	29·040	39·743	7·260	48½
49	151·538	44·463	196·000	59·284	107·074	29·642	40·380	7·410	49
49½	154·458	45·375	199·833	60·500	109·083	30·250	41·021	7·562	49½
50	157·407	46·296	203·704	61·728	111·111	30·864	41·667	7·716	50
50½	160·384	47·227	207·611	62·970	113·157	31·485	42·317	7·871	50½
51	163·389	48·167	211·556	64·222	115·222	32·111	42·972	8·028	51
51½	166·420	49·116	215·536	65·488	117·306	32·744	43·632	8·186	51½
52	169·480	50·074	219·556	66·765	119·407	33·383	44·296	8·346	52
52½	172·568	51·042	223·611	68·056	121·528	34·028	44·965	8·507	52½
53	175·685	52·018	227·704	69·357	123·667	34·679	45·639	8·670	53
53½	178·828	53·004	231·833	70·672	125·824	35·336	46·317	8·834	53½
54	182·000	54·000	236·000	72·000	128·000	36·000	47·000	9·000	54
54½	185·199	55·004	240·204	73·339	130·194	36·670	47·687	9·167	54½
55	188·425	56·018	244·444	74·691	132·407	37·346	48·380	9·336	55
55½	191·680	57·042	248·722	76·056	134·639	38·028	49·076	9·507	55½
56	194·963	58·074	253·037	77·432	136·889	38·716	49·778	9·679	56
56½	198·272	59·116	257·389	78·821	139·157	39·411	50·484	9·853	56½
57	201·611	60·167	261·778	80·222	141·444	40·111	51·194	10·028	57
57½	204·977	61·227	266·204	81·636	143·750	40·818	51·910	10·204	57½
58	208·370	62·296	270·667	83·061	146·075	41·531	52·630	10·383	58
58½	211·792	63·375	275·167	84·500	148·417	42·250	53·354	10·563	58½
59	215·240	64·463	279·704	85·951	150·778	42·975	54·083	10·744	59
59½	218·717	65·560	284·278	87·413	153·157	43·707	54·817	10·927	59½
60	222·222	66·667	288·889	88·889	155·556	44·444	55·556	11·111	60

TABLE VI.—Base 11 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		½ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·218	·004	·222	·005	·213	·003	·206	·001	½
1	·463	·018	·481	·024	·444	·012	·417	·003	1
1½	·736	·042	·778	·056	·694	·028	·632	·007	1½
2	1·037	·074	1·111	·099	·963	·049	·852	·012	2
2½	1·366	·116	1·481	·155	1·250	·077	1·076	·019	2½
3	1·722	·167	1·889	·222	1·556	·111	1·306	·028	3
3½	2·106	·227	2·333	·303	1·879	·151	1·539	·039	3½
4	2·518	·296	2·815	·395	2·222	·197	1·778	·049	4
4½	2·959	·375	3·333	·500	2·584	·250	2·021	·062	4½
5	3·426	·463	3·889	·617	2·963	·309	2·268	·077	5
5½	3·922	·560	4·481	·747	3·362	·374	2·521	·093	5½
6	4·444	·667	5·111	·889	3·778	·444	2·778	·111	6
6½	4·995	·782	5·778	1·044	4·213	·522	3·039	·130	6½
7	5·574	·907	6·481	1·209	4·667	·605	3·306	·151	7
7½	6·180	1·042	7·222	1·389	5·139	·695	3·576	·174	7½
8	6·815	1·185	8·000	1·580	5·630	·790	3·852	·197	8
8½	7·477	1·338	8·815	1·784	6·139	·892	4·132	·223	8½
9	8·167	1·500	9·667	2·000	6·667	1·000	4·417	·250	9
9½	8·884	1·672	10·556	2·229	7·213	1·115	4·706	·279	9½
10	9·630	1·852	11·481	2·470	7·778	1·235	5·000	·309	10
10½	10·403	2·042	12·444	2·723	8·362	1·361	5·299	·340	10½
11	11·203	2·241	13·444	2·988	8·963	1·494	5·602	·373	11
11½	12·033	2·449	14·481	3·265	9·584	1·633	5·910	·408	11½
12	12·889	2·667	15·556	3·556	10·222	1·778	6·222	·444	12
12½	13·773	2·894	16·667	3·859	10·879	1·929	6·539	·482	12½
13	14·685	3·129	17·815	4·173	11·556	2·086	6·861	·521	13
13½	15·625	3·375	19·000	4·500	12·250	2·250	7·187	·562	13½
14	16·592	3·630	20·222	4·839	12·963	2·419	7·519	·605	14
14½	17·588	3·894	21·481	5·191	13·694	2·596	7·854	·649	14½
15	18·611	4·167	22·778	5·556	14·444	2·778	8·194	·694	15
15½	19·662	4·449	24·111	5·933	15·213	2·966	8·539	·741	15½
16	20·740	4·741	25·481	6·321	16·000	3·161	8·889	·790	16
16½	21·847	5·042	26·889	6·723	16·806	3·361	9·243	·840	16½
17	22·982	5·352	28·333	7·136	17·630	3·568	9·602	·892	17
17½	24·143	5·671	29·815	7·562	18·472	3·781	9·965	·945	17½
18	25·333	6·000	31·333	8·000	19·333	4·000	10·333	1·000	18
18½	26·551	6·338	32·889	8·451	20·213	4·225	10·706	1·056	18½
19	27·796	6·685	34·481	8·913	21·111	4·457	11·083	1·114	19
19½	29·069	7·042	36·111	9·389	22·028	4·695	11·465	1·174	19½
20	30·370	7·407	37·778	9·877	22·963	4·939	11·852	1·235	20
20½	31·699	7·782	39·481	10·377	23·917	5·188	12·243	1·297	20½
21	33·055	8·167	41·222	10·889	24·889	5·444	12·639	1·361	21
21½	34·440	8·560	43·000	11·413	25·879	5·707	13·039	1·427	21½
22	35·852	8·963	44·815	11·951	26·889	5·975	13·444	1·494	22
22½	37·292	9·375	46·667	12·500	27·917	6·250	13·854	1·562	22½
23	38·759	9·796	48·556	13·061	28·963	6·531	14·269	1·633	23
23½	40·255	10·227	50·481	13·636	30·028	6·818	14·687	1·705	23½
24	41·778	10·667	52·444	14·222	31·111	7·111	15·111	1·778	24
24½	43·329	11·116	54·444	14·821	32·213	7·411	15·539	1·853	24½
25	44·907	11·574	56·481	15·432	33·333	7·716	15·972	1·929	25
25½	46·513	12·042	58·556	16·056	34·472	8·028	16·410	2·007	25½
26	48·148	12·518	60·667	16·691	35·630	8·347	16·852	2·086	26
26½	49·810	13·004	62·815	17·339	36·806	8·670	17·299	2·167	26½
27	51·500	13·500	65·000	18·000	38·000	9·000	17·750	2·250	27
27½	53·217	14·004	67·222	18·672	39·213	9·336	18·206	2·334	27½
28	54·962	14·518	69·481	19·357	40·444	9·679	18·667	2·420	28
28½	56·735	15·042	71·778	20·056	41·694	10·028	19·132	2·507	28½
29	58·537	15·574	74·111	20·765	42·963	10·383	19·602	2·596	29
29½	60·336	16·116	76·481	21·488	44·250	10·744	20·076	2·686	29½
30	62·222	16·667	78·889	22·222	45·556	11·111	20·556	2·778	30

TABLE VI.—Base 11 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
30½	64·106	17·227	81·333	22·970	46·879	11·485	21·039	2·871	30½
31	66·018	17·796	83·815	23·728	48·222	11·864	21·528	2·966	31
31½	67·959	18·375	86·333	24·500	49·584	12·250	22·021	3·062	31½
32	69·926	18·963	88·889	25·284	50·963	12·642	22·519	3·160	32
32½	71·922	19·560	91·481	26·080	52·362	13·040	23·021	3·260	32½
33	73·944	20·167	94·111	26·889	53 778	13·444	23·528	3·361	33
33½	75·995	20·782	96·778	27·709	55·213	13·855	24·039	3·464	33½
34	78·074	21·407	99·481	28·543	56·667	14·272	24·556	3·568	34
34½	80·180	22·042	102·222	29·389	58·139	14·694	25·076	3·674	34½
35	82·315	22·685	105·000	30·247	59·630	15·123	25·602	3·781	35
35½	84·477	23·338	107·815	31·117	61·139	15·559	26·132	3·890	35½
36	86·667	24·000	110·667	32·000	62·667	16·000	26·667	4·000	36
36½	88·884	24·671	113·556	32·895	64·213	16·447	27·206	4·112	36½
37	91·130	25·352	116·481	33 802	65·778	16·901	27·750	4·225	37
37½	93·403	26·042	119·444	34·722	67·362	17·361	28·299	4·340	37½
38	95·703	26·741	122·444	35·654	68·963	17·827	28·852	4·457	38
38½	98·033	27·449	125·481	36·599	70·584	18·299	29·410	4·575	38½
39	100·389	28·167	128·556	37·556	72·222	18·778	29·972	4·694	39
39½	102·773	28·894	131·667	38·525	73·879	19·263	30·539	4·816	39½
40	105·185	29·630	134·815	39·506	75·556	19·753	31·111	4·938	40
40½	107·625	30·375	138·000	40·500	77·250	20·250	31·687	5·062	40½
41	110·092	31·129	141·222	41·506	78·963	20·753	32·269	5·188	41
41½	112·588	31·894	144·481	42·525	80·694	21·263	32·854	5·316	41½
42	115·111	32·667	147·778	43·556	82·444	21·778	33·444	5·444	42
42½	117·662	33·449	151·111	44·599	84·213	22·299	34·039	5·575	42½
43	120·240	34·241	154·481	45·654	86·000	22·827	34·639	5·707	43
43½	122·847	35·042	157·889	46·722	87·806	23·361	35·243	5·840	43½
44	125·482	35·852	161·333	47·802	89·630	23·901	35·852	5 975	44
44½	128·143	36·671	164·815	48·895	91·472	24·447	36·465	6·112	44½
45	130·833	37·500	168·333	50·000	93·333	25·000	37·083	6·250	45
45½	133·551	38·338	171·889	51·117	95·213	25·559	37·706	6·390	45½
46	136·296	39·185	175·481	52·247	97·111	26·123	38·333	6·531	46
46½	139·069	40·042	179·111	53·389	99·028	26·694	38·965	6·673	46½
47	141·870	40·907	182·778	54·543	100·963	27·272	39·602	6·818	47
47½	144·699	41·782	186·481	55·709	102·917	27·855	40·243	6·964	47½
48	147·556	42·667	190·222	56·889	104·889	28·444	40·889	7·111	48
48½	150·439	43·560	194·000	58·080	106·879	29·040	41·539	7·260	48½
49	153·352	44·463	197·815	59·284	108·889	29·642	42·194	7·410	49
49½	156·292	45·375	201·667	60·500	110·917	30·250	42·854	7·562	49½
50	159·259	46·296	205·556	61·728	112·963	30·864	43·519	7·716	50
50½	162·255	47·227	209·481	62·970	115·028	31·485	44·187	7·871	50½
51	165·278	48·167	213·444	64·222	117·111	32·111	44·861	8·028	51
51½	168·329	49·116	217·444	65·488	119·213	32·744	45·539	8·186	51½
52	171·407	50·074	221·481	66·765	121·333	33·383	46·222	8·346	52
52½	174·513	51·042	225·556	68·056	123·472	34·028	46·910	8·507	52½
53	177·648	52·018	229·667	69·357	125·630	34·679	47·602	8·670	53
53½	180·810	53·004	233·815	70·672	127·806	35·336	48·299	8·834	53½
54	184·000	54·000	238·000	72·000	130·000	36·000	49·000	9·000	54
54½	187·218	55·004	242·222	73·339	132·213	36·670	49·706	9·167	54½
55	190·462	56·018	246·481	74·691	134·444	37·346	50·417	9·336	55
55½	193·735	57·042	250·778	76·056	136·694	38·028	51·132	9·507	55½
56	197·037	58·074	255·111	77·432	138·963	38·716	51·852	9·679	56
56½	200·366	59·116	259·481	78·821	141·250	39·411	52·576	9·853	56½
57	203·722	60·167	263·889	80·222	143·556	40·111	53·306	10·028	57
57½	207·106	61·227	268·333	81·636	145·879	40·818	54·039	10·204	57½
58	210·518	62·296	272·815	83·061	148·222	41·531	54·778	10·383	58
58½	213·959	63·375	277·333	84·500	150·584	42·250	55·521	10·563	58½
59	217·426	64·463	281·889	85·951	152·963	42·975	56·268	10·744	59
59½	220·922	65·560	286·481	87·413	155·362	43·707	57·021	10·927	59½
60	224·444	66·667	291·111	88·889	157·778	44·444	57·778	11·111	60

TABLE VII.—Base 12 Feet.

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights
¼	·115	·001	·116	·002	¼	19·698	4·307	24·005	5·742
½	·236	·004	·241	·005	½	20·236	4·449	24·685	5·933
¾	·365	·010	·375	·014	¾	20·781	4·594	25·375	6·125
1	·500	·018	·519	·024	16	21·333	4·741	26·074	6·321
¼	·642	·029	·671	·039	¼	21·892	4·890	26·782	6·520
½	·792	·042	·833	·056	½	22·458	5·042	27·500	6·723
¾	·948	·057	1·005	·076	¾	23·031	5·196	28·227	6·928
2	1·111	·074	1·185	·099	17	23·611	5·352	28·963	7·136
¼	1·281	·094	1·375	·125	¼	24·198	5·510	29·708	7·347
½	1·458	·116	1·574	·155	½	24·792	5·671	30·463	7·562
¾	1·642	·140	1·782	·187	¾	25·392	5·835	31·227	7·779
3	1·833	·167	2·000	·222	18	26·000	6·000	32·000	8·000
¼	2·031	·196	2·227	·261	¼	26·615	6·168	32·782	8·224
½	2·236	·227	2·463	·303	½	27·236	6·338	33·574	8·451
¾	2·448	·260	2·708	·347	¾	27·865	6·510	34·375	8·681
4	2·667	·296	2·963	·395	19	28·500	6·685	35·185	8·913
¼	2·892	·334	3·227	·446	¼	29·142	6·862	36·005	9·150
½	3·125	·375	3·500	·500	½	29·792	7·042	36·833	9·389
¾	3·365	·418	3·782	·557	¾	30·448	7·223	37·671	9·631
5	3·611	·463	4·074	·617	20	31·111	7·407	38·519	9·877
¼	3·865	·510	4·375	·681	¼	31·781	7·594	39·375	10·125
½	4·125	·560	4·685	·747	½	32·458	7·782	40 241	10·377
¾	4·392	·612	5·005	·816	¾	33·142	7·973	41·116	10·631
6	4·667	·667	5·333	·889	21	33·833	8·167	42·000	10·889
¼	4·948	·723	5·671	·965	¼	34·531	8·362	42·894	11·150
½	5·236	·782	6·019	1·044	½	35·236	8·560	43·796	11·413
¾	5·531	·844	6·375	1·125	¾	35·948	8·760	44·708	11·681
7	5·833	·907	6·741	1·209	22	36·667	8·963	45·630	11·951
¼	6·142	·973	7·116	1·298	¼	37·392	9·168	46·560	12·224
½	6·458	1·042	7·500	1·389	½	38·125	9·375	47·500	12·500
¾	6·781	1·112	7·894	1·483	¾	38·865	9·585	48·449	12·779
8	7·111	1·185	8·296	1·580	23	39·611	9·796	49·407	13·061
¼	7·448	1·260	8·708	1·681	¼	40·365	10·010	50·375	13·347
½	7·792	1·338	9·130	1·784	½	41·125	10·227	51·352	13·636
¾	8·142	1·418	9·560	1·890	¾	41·892	10·446	52·338	13·928
9	8·500	1·500	10·000	2·000	24	42·667	10·667	53·333	14·222
¼	8·865	1·584	10·449	2·113	¼	43·448	10·890	54·338	14·520
½	9·236	1·672	10·907	2·229	½	44·236	11·116	55·352	14·821
¾	9·615	1·760	11·375	2·347	¾	45·031	11·344	56·375	15·125
10	10·000	1·852	11·852	2·470	25	45·833	11·574	57·407	15·432
¼	10·392	1·946	12·338	2·594	¼	46·642	11·807	58·449	15·742
½	10·792	2·042	12·833	2·723	½	47·458	12·042	59·500	16·056
¾	11·198	2·140	13·338	2·853	¾	48·281	12·279	60·560	16·372
11	11·611	2·241	13·852	2·988	26	49·111	12·518	61·630	16·691
¼	12·031	2·344	14·375	3·125	¼	49·948	12·760	62·708	17·014
½	12·458	2·449	14·907	3·265	½	50·792	13·004	63·796	17·339
¾	12·892	2·557	15·449	3·409	¾	51·642	13·251	64·894	17·668
12	13·333	2·667	16·000	3·556	27	52·500	13·500	66·000	18·000
¼	13·781	2·779	16·560	3·705	¼	53·365	13·751	67·116	18·335
½	14·236	2·894	17·130	3·859	½	54·236	14·004	68·241	18·672
¾	14·698	3·010	17·708	4·014	¾	55·115	14·260	69·375	19·014
13	15·167	3·129	18·296	4·173	28	56·000	14·518	70·519	19·357
¼	15·642	3·251	18·894	4·335	¼	56·892	14·779	71·671	19·705
½	16·125	3·375	19·500	4·500	½	57·792	15·042	72·833	20·056
¾	16·615	3·501	20·116	4·668	¾	58·698	15·307	74·005	20·409
14	17·111	3·630	20·741	4·839	29	59·611	15·574	75·185	20·765
¼	17·615	3·760	21·375	5·014	¼	60·531	15·844	76·375	21·125
½	18·125	3·894	22·019	5·191	½	61·458	16·116	77·574	21·488
¾	18·642	4·029	22·671	5·372	¾	62·392	16·390	78·782	21·853
15	19·167	4·167	23·333	5·556	30	63·333	16·667	80·000	22·222

TABLE VII.—Base 12 Feet.

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	64·281	16·946	81·227	22·594		133·865	37·918	171·782	50·557
	65·236	17·227	82·463	22·970		135·236	38·338	173·574	51·117
	66·198	17·510	83·708	23·347		136·615	38·760	175·375	51·681
31	67·167	17·796	84·963	23·728	46	138·000	39·185	177·185	52·247
	68·142	18·084	86·227	24·113		139·392	39·612	179·005	52·816
	69·125	18·375	87·500	24·500		140·792	40·042	180·833	53·389
	70·115	18·668	88·782	24·890		142·198	40·473	182·671	53·965
32	71·111	18·963	90·074	25·284	47	143·611	40·907	184·519	54·543
	72·115	19·260	91·375	25·681		145·031	41·344	186·375	55·125
	73·125	19·560	92·685	26·080		146·458	41·782	188·241	55·709
	74·142	19·862	94·005	26·483		147·892	42·223	190·116	56·298
33	75·167	20·167	95·333	26·889	48	149·333	42·667	192·000	56·889
	76·198	20·473	96·671	27·298		150·781	43·112	193·894	57·483
	77·236	20·782	98·019	27·709		152·236	43·560	195·796	58·080
	78·281	21·094	99·375	28·125		153·698	44·010	197·708	58·681
34	79·333	21·407	100·741	28·543	49	155·167	44·463	199·630	59·284
	80·392	21·723	102·116	28·965		156·642	44·918	201·560	59·890
	81·458	22·042	103·500	29·389		158·125	45·375	203·500	60·500
	82·531	22·362	104·894	29·816		159·615	45·834	205·449	61·113
35	83·611	22·685	106·296	30·247	50	161·111	46·296	207·407	61·728
	84·698	23·010	107·708	30·681		162·615	46·760	209·375	62·347
	85·792	23·338	109·130	31·117		164·125	47·227	211·352	62·970
	86·892	23·668	110·560	31·557		165·642	47·696	213·338	63·594
36	88·000	24·000	112·000	32·000	51	167·167	48·167	215·333	64·222
	89·115	24·334	113·449	32·446		168·698	48·640	217·338	64·853
	90·236	24·671	114·907	32·895		170·236	49·116	219·352	65·488
	91·365	25·010	116·375	33·347		171·781	49·594	221·375	66·125
37	92·500	25·352	117·852	33·802	52	173·333	50·074	223·407	66·765
	93·642	25·696	119·338	34·261		174·892	50·557	225·449	67·409
	94·792	26·042	120·833	34·722		176·458	51·042	227·500	68·056
	95·948	26·390	122·338	35·187		178·031	51·529	229·560	68·705
38	97·111	26·741	123·852	35·654	53	179·611	52·018	231·630	69·357
	98·281	27·094	125·375	36·125		181·198	52·510	233·708	70·014
	99·458	27·449	126·907	36·599		182·792	53·004	235·796	70 672
	100·642	27·807	128·449	37·076		184·392	53·501	237·894	71·335
39	101·833	28·167	130·000	37·556	54	186·000	54·000	240·000	72·000
	103·031	28·529	131·560	38·039		187·615	54·501	242·116	72·668
	104·236	28·894	133·130	38·525		189·236	55·004	244·241	73·339
	105·448	29·260	134·708	39·014		190·865	55·510	246·375	74·014
40	106·667	29·630	136·296	39·506	55	192·500	56·018	248·519	74·691
	107·892	30·001	137·894	40·002		194·142	56·529	250·671	75·372
	109·125	30·375	139·500	40·500		195·792	57·042	252·833	76·056
	110·365	30·751	141·116	41·002		197·448	57·557	255·005	76·742
41	111·611	31·129	142·741	41·506	56	199·111	58·074	257·185	77·432
	112·865	31·510	144·375	42·014		200·781	58·594	259·375	78·125
	114·125	31·894	146·019	42·525		202·458	59·116	261·574	78·821
	115·392	32·279	147·671	43·039		204·142	59·640	263·782	79·520
42	116·667	32·667	149·333	43·556	57	205·833	60·167	266·000	80·222
	117·948	33·057	151·005	44·076		207·531	60·696	268·227	80·928
	119·236	33·449	152·685	44·599		209·236	61·227	270·463	81·636
	120·531	33·844	154·375	45·125		210·948	61·760	272·708	82·347
43	121·833	34·241	156·074	45·654	58	212·667	62·296	274·963	83·061
	123·142	34·640	157·782	46·187		214·392	62·834	277·227	83·779
	124·458	35·042	159·500	46·722		216·125	63·375	279·500	84·500
	125·781	35·446	161·227	47·261		217·865	63·918	281·782	85·224
44	127·111	35·852	162·963	47·802	59	219·611	64·463	284·074	85·951
	128·448	36·260	164·708	48·347		221·365	65·010	286·375	86·681
	129·792	36·671	166·463	48·895		223·125	65·560	288·685	87·413
	131·142	37·085	168·227	49·446		224·892	66·112	291·005	88·150
45	132·500	37·500	170·000	50·000	60	226·667	66·667	293·333	88·889

TABLE VII.—Base 12 Feet—*continued.*

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	·113	·001	·112	·000	¼	15·391	2·871	8·931	·718
½	·231	·003	·225	·001	½	15·787	2·966	9·113	·741
¾	·354	·007	·339	·002	¾	16·187	3·063	9·297	·766
1	·481	·012	·454	·003	16	16·593	3·161	9·482	·790
¼	·613	·019	·570	·005	¼	17·002	3·260	9·667	·815
½	·750	·028	·687	·007	½	17·417	3·361	9·854	·840
¾	·891	·038	·806	·009	¾	17·836	3·464	10·042	·866
2	1·037	·049	·926	·012	17	18·259	3·568	10·231	·892
¼	1·187	·062	1·047	·016	¼	18·687	3·674	10·422	·918
½	1·343	·077	1·169	·019	½	19·120	3·781	10·613	·945
¾	1·502	·093	1·292	·023	¾	19·558	3·890	10·806	·972
3	1·667	·111	1·417	·028	18	20·000	4·000	11·000	1·000
¼	1·836	·130	1·542	·033	¼	20·447	4·112	11·195	1·028
½	2·009	·151	1·669	·039	½	20·898	4·225	11·391	1·056
¾	2·187	·174	1·797	·043	¾	21·354	4·340	11·589	1·085
4	2·370	·197	1·926	·049	19	21·815	4·457	11·787	1·114
¼	2·558	·223	2·056	·056	¼	22·280	4·575	11·987	1·144
½	2·750	·250	2·188	·062	½	22·750	4·695	12·187	1·174
¾	2·947	·279	2·320	·070	¾	23·225	4·816	12·389	1·204
5	3·148	·309	2·454	·077	20	23·704	4·939	12·593	1·235
¼	3·354	·340	2·589	·085	¼	24·187	5·063	12·797	1·266
½	3·565	·374	2·725	·093	½	24·676	5·188	13·002	1·297
¾	3·780	·408	2·862	·102	¾	25·169	5·316	13·209	1·329
6	4·000	·444	3·000	·111	21	25·667	5·444	13·417	1·361
¼	4·225	·482	3·139	·121	¼	26·169	5·575	13·626	1·394
½	4·454	·522	3·280	·130	½	26·676	5·707	13·836	1·427
¾	4·687	·562	3·422	·141	¾	27·187	5·840	14·047	1·460
7	4·926	·605	3·565	·151	22	27·704	5·975	14·259	1·494
¼	5·169	·649	3·709	·162	¼	28·225	6·112	14·473	1·528
½	5·417	·695	3·854	·174	½	28·750	6·250	14·688	1·562
¾	5·669	·742	4·001	·185	¾	29·280	6·390	14·903	1·597
8	5·926	·790	4·148	·197	23	29·815	6·531	15·120	1·633
¼	6·187	·840	4·297	·210	¼	30·354	6·674	15·339	1·668
½	6·454	·892	4·447	·223	½	30·898	6·818	15·558	1·705
¾	6·725	·945	4·598	·236	¾	31·447	6·964	15·778	1·741
9	7·000	1·000	4·750	·250	24	32·000	7·111	16·000	1·778
¼	7·280	1·056	4·903	·264	¼	32·558	7·260	16·223	1·815
½	7·565	1·115	5·058	·279	½	33·120	7·411	16·447	1·853
¾	7·854	1·174	5·214	·293	¾	33·687	7·563	16·672	1·891
10	8·148	1·235	5·370	·309	25	34·259	7·716	16·898	1·929
¼	8·447	1·297	5·528	·324	¼	34·836	7·871	17·126	1·968
½	8·750	1·361	5·687	·340	½	35·417	8·028	17·354	2·007
¾	9·058	1·427	5·848	·357	¾	36·002	8·186	17·584	2·046
11	9·370	1·494	6·009	·373	26	36·593	8·347	17·815	2·086
¼	9·687	1·562	6·172	·391	¼	37·187	8·507	18·047	2·127
½	10·009	1·633	6·336	·408	½	37·787	8·670	18·280	2·167
¾	10·336	1·704	6·501	·426	¾	38·391	8·834	18·514	2·209
12	10·667	1·778	6·667	·444	27	39·000	9·000	18·750	2·250
¼	11·002	1·853	6·834	·463	¼	39·613	9·167	18·987	2·292
½	11·343	1·929	7·002	·482	½	40·231	9·336	19·225	2·334
¾	11·687	2·007	7·172	·502	¾	40·854	9·507	19·464	2·377
13	12·037	2·086	7·343	·521	28	41·481	9·679	19·704	2·420
¼	12·391	2·167	7·514	·542	¼	42·113	9·853	19·945	2·463
½	12·750	2·250	7·688	·562	½	42·750	10·028	20·188	2·507
¾	13·113	2·334	7·862	·584	¾	43·391	10·204	20·431	2·551
14	13·481	2·419	8·037	·605	29	44·037	10·383	20·676	2·596
¼	13·854	2·507	8·214	·627	¼	44·687	10·563	20·922	2·641
½	14·231	2·596	8·391	·649	½	45·343	10·744	21·169	2·686
¾	14·613	2·686	8·570	·671	¾	46·002	10·927	21·417	2·732
15	15·000	2·778	8·750	·694	30	46·667	11·111	21·667	2·778

Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	47·336	11·297	21·917	2·824
	48·009	11·485	22·169	2·871
	48·687	11·674	22·422	2·918
31	49·370	11·864	22·676	2·966
	50·058	12·056	22·931	3·014
	50·750	12·250	23·188	3·062
	51·447	12·445	23·445	3·111
32	52·148	12·642	23·704	3·160
	52·854	12·840	23·964	3·210
	53·565	13·040	24·225	3·260
	54·280	13·242	24·487	3·310
33	55·000	13·444	24·750	3·361
	55·725	13·649	25·014	3·412
	56·454	13·855	25·280	3·464
	57·187	14·062	25·547	3·516
34	57·926	14·272	25·815	3·568
	58·669	14·482	26·084	3·621
	59·417	14·694	26·354	3·674
	60·169	14·908	26·626	3·727
35	60·926	15·123	26·898	3·781
	61·687	15·340	27·172	3·835
	62·454	15·559	27·447	3·890
	63·225	15·779	27·723	3·945
36	64·000	16·000	28·000	4·000
	64·780	16·223	28·278	4·056
	65·565	16·447	28·558	4·112
	66·354	16·674	28·839	4·168
37	67·148	16·901	29·120	4·225
	67·947	17·130	29·403	4·283
	68·750	17·361	29·687	4·340
	69·558	17·593	29·973	4·398
38	70·370	17·827	30·259	4·457
	71·187	18·062	30·547	4·516
	72·009	18·299	30·836	4·575
	72·836	18·538	31·126	4·634
39	73·667	18·778	31·417	4·694
	74·502	19·019	31·709	4·755
	75·343	19·263	32·002	4·816
	76·187	19·507	32·297	4·877
40	77·037	19·753	32·593	4·938
	77·891	20·001	32·889	5·000
	78·750	20·250	33·187	5·062
	79·613	20·501	33·487	5·125
41	80·481	20·753	33·787	5·188
	81·354	21·007	34·089	5·252
	82·231	21·263	34·391	5·316
	83·113	21·519	34·695	5·380
42	84·000	21·778	35·000	5·444
	84·891	22·038	35·306	5·509
	85·787	22·299	35·613	5·575
	86·687	22·563	35·922	5·641
43	87·593	22·827	36·231	5·707
	88·502	23·093	36·542	5·773
	89·417	23·361	36·854	5·840
	90·336	23·630	37·167	5·908
44	91·259	23·901	37·481	5·975
	92·187	24·174	37·797	6·043
	93·120	24·447	38·113	6·112
	94·058	24·723	38·431	6·181
45	95·000	25·000	38·750	6·250

Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights	Centre and Slopes	Add half difference of heights.
	95·947	25·279	39·070	6·320
	96·898	25·559	39·391	6·390
	97·854	25·840	39·714	6·460
46	98·815	26·123	40·037	6·531
	99·780	26·408	40·362	6·602
	100·750	26·694	40·687	6·673
	101·725	26·982	41·014	6·746
47	102·704	27 272	41·343	6·818
	103·687	27·563	41·672	6·891
	104·676	27·855	42·002	6·964
	105 669	28·149	42·334	7·037
48	106·667	28·444	42·667	7·111
	107·669	28·742	43·001	7·185
	108·676	29·040	43·336	7·260
	109·687	29·340	43·672	7·335
49	110·704	29·642	44·009	7·410
	111·725	29·945	44·348	7·486
	112·750	30·250	44·688	7·562
	113·780	30·556	45·028	7·639
50	114·815	30·864	45·370	7·716
	115·854	31·174	45·714	7·793
	116·898	31·485	46·058	7·871
	117·947	31·797	46·403	7·949
51	119·000	32·111	46·750	8·028
	120·058	32·427	47·098	8·107
	121·120	32·744	47·447	8·186
	122·187	33·063	47·797	8·266
52	123·259	33·383	48·148	8·346
	124·336	33·704	48·501	8·426
	125·417	34·028	48·854	8·507
	126·502	34·353	49·209	8·588
53	127·593	34·679	49·565	8·670
	128·687	35·007	49·922	8·752
	129·787	35·336	50·280	8·834
	130 891	35·667	50·639	8·917
54	132·000	36·000	51·000	9·000
	133·113	36·334	51·362	9·084
	134·231	36·670	51·725	9·167
	135·354	37·007	52·089	9·252
55	136·481	37·346	52·454	9·336
	137·613	37·686	52·820	9·421
	138·750	38·028	53·188	9·507
	139·891	38·371	53·556	9·593
56	141·037	38·716	53·926	9·679
	142·187	39·063	54·297	9·766
	143·343	39·411	54·669	9·853
	144·502	39·760	55·042	9·940
57	145·667	40·111	55·417	10·028
	146·836	40·464	55·792	10·116
	148·009	40·818	56·169	10·204
	149·187	41·174	56·547	10·293
58	150·370	41·531	56·926	10·383
	151·558	41·890	57·306	10·472
	152·750	42·250	57·687	10·563
	153·947	42·612	58·070	10·653
59	155·148	42·975	58·454	10·744
	156·354	43·340	58·839	10·835
	157·565	43·707	59·225	10·927
	158·780	44·075	59·612	11·019
60	160·000	44·444	60·000	11·111

TABLE VIII.—Base 13 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·254	·004	·259	·005	·250	·003	·243	·001	½
1	·537	·018	·556	·024	·519	·012	·491	·003	1
1½	·847	·042	·889	·056	·806	·028	·743	·007	1½
2	1·185	·074	1·259	·099	1·111	·049	1·000	·012	2
2½	1·552	·116	1·667	·155	1·436	·077	1·262	·019	2½
3	1·944	·167	2·111	·222	1·778	·111	1·528	·028	3
3½	2·366	·227	2·593	·303	2·139	·151	1·799	·039	3½
4	2·814	·296	3·111	·395	2·519	·197	2·074	·049	4
4½	3·292	·375	3·667	·500	2·917	·250	2·354	·062	4½
5	3·796	·463	4·259	·617	3·333	·309	2·639	·077	5
5½	4·329	·560	4·889	·747	3·769	·374	2·928	·093	5½
6	4·889	·667	5·556	·889	4·222	·444	3·222	·111	6
6½	5·477	·782	6·259	1·044	4·695	·522	3·521	·130	6½
7	6·092	·907	7·000	1·209	5·185	·605	3·824	·151	7
7½	6·736	1·042	7·778	1·389	5·695	·695	4·132	·174	7½
8	7·407	1·185	8·593	1·580	6·222	·790	4·444	·197	8
8½	8·107	1·338	9·444	1·784	6·769	·892	4·762	·223	8½
9	8·833	1·500	10·333	2·000	7·333	1·000	5·083	·250	9
9½	9·588	1·672	11·259	2·229	7·917	1·115	5·410	·279	9½
10	10·371	1·852	12·222	2·470	8·519	1·235	5·741	·309	10
10½	11·180	2·042	13·222	2·723	9·139	1·361	6·076	·340	10½
11	12·018	2·241	14·259	2·988	9·778	1·494	6·417	·373	11
11½	12·885	2·449	15·333	3·265	10·436	1·633	6·762	·408	11½
12	13·778	2·667	16·444	3·556	11·111	1·778	7·111	·444	12
12½	14·700	2·894	17·593	3·859	11·806	1·929	7·465	·482	12½
13	15·648	3·129	18·778	4·173	12·519	2·086	7·824	·521	13
13½	16·625	3·375	20·000	4·500	13·250	2·250	8·188	·562	13½
14	17·629	3·630	21·259	4·839	14·000	2·419	8·556	·605	14
14½	18·663	3·894	22·556	5·191	14·769	2·596	8·928	·649	14½
15	19·722	4·167	23·889	5·556	15·556	2·778	9·306	·694	15
15½	20·811	4·449	25·259	5·933	16·362	2·966	9·687	·741	15½
16	21·925	4·741	26·667	6·321	17·185	3·161	10·074	·790	16
16½	23·069	5·042	28·111	6·723	18·028	3·361	10·465	·840	16½
17	24·241	5·352	29·593	7·136	18·889	3·568	10·861	·892	17
17½	25·440	5·671	31·111	7·562	19·769	3·781	11·262	·945	17½
18	26·667	6·000	32·667	8·000	20·667	4·000	11·667	1·000	18
18½	27·921	6·338	34·259	8·451	21·583	4·225	12·076	1·056	18½
19	29·204	6·685	35·889	8·913	22·519	4·457	12·491	1·114	19
19½	30·513	7·042	37·556	9·389	23·472	4·695	12·910	1·174	19½
20	31·851	7·407	39·259	9·877	24·444	4·939	13·333	1·235	20
20½	33·218	7·782	41·000	10·377	25·436	5·188	13·762	1·297	20½
21	34·611	8·167	42·778	10·889	26·444	5·444	14·194	1·361	21
21½	36·032	8·560	44·593	11·413	27·472	5·707	14·632	1·427	21½
22	37·482	8·963	46·444	11·951	28·519	5·975	15·074	1·494	22
22½	38·958	9·375	48·333	12·500	29·583	6·250	15·521	1·562	22½
23	40·463	9·796	50·259	13·061	30·667	6·531	15·972	1·633	23
23½	41·996	10·227	52·222	13·636	31·769	6·818	16·428	1·705	23½
24	43·556	10·667	54·222	14·222	32·889	7·111	16·889	1·778	24
24½	45·144	11·116	56·259	14·821	34·028	7·411	17·354	1·853	24½
25	46·759	11·574	58·333	15·432	35·185	7·716	17·824	1·929	25
25½	48·403	12·042	60·444	16·056	36·362	8·028	18·299	2·007	25½
26	50·074	12·518	62·593	16·691	37·556	8·347	18·778	2·086	26
26½	51·773	13·004	64·778	17·339	38·769	8·670	19·262	2·167	26½
27	53·500	13·500	67·000	18·000	40·000	9·000	19·750	2·250	27
27½	55·254	14·004	69·259	18·672	41·250	9·336	20·243	2·334	27½
28	57·037	14·518	71·556	19·357	42·519	9·679	20·741	2·420	28
28½	58·847	15·042	73·889	20·056	43·806	10·028	21·243	2·507	28½
29	60·685	15·574	76·259	20·765	45·111	10·383	21·750	2·596	29
29½	62·552	16·116	78·667	21·488	46·436	10·744	22·262	2·686	29½
30	64·444	16·667	81·111	22·222	47·778	11·111	22·778	2·778	30

TABLE VIII.—Base 13 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
30½	66·366	17·227	83·593	22·970	49·139	11·485	23·299	2·871	30½
31	68·315	17·796	86·111	23·728	50·519	11 864	23·824	2·966	31
31½	70·292	18·375	88·667	24·500	51·917	12·250	24·354	3·062	31½
32	72·296	18·963	91·259	25·284	53·333	12·642	24·889	3·160	32
32½	74·329	19·560	93·889	26·080	54·769	13·040	25·428	3·260	32½
33	76·389	20·167	96·556	26·889	56·222	13·444	25·972	3·361	33
33½	78·477	20·782	99·259	27·709	57·695	13·855	26·521	3·464	33½
34	80·592	21·407	102·000	28·543	59·185	14·272	27·074	3·568	34
34½	82·736	22·042	104·778	29·389	60·695	14·694	27·632	3·674	34½
35	84·907	22·685	107·593	30·247	62·222	15·123	28·194	3·781	35
35½	87·107	23·338	110·444	31·117	63·769	15·559	28·762	3·890	35½
36	89·333	24·000	113·333	32·000	65·333	16·000	29·333	4·000	36
36½	91·588	24·671	116·259	32·895	66·917	16·447	29·910	4·112	36½
37	93·871	25·352	119·222	33·802	68·519	16·901	30·491	4·225	37
37½	96·180	26·042	122·222	34·722	70·139	17·361	31·076	4·340	37½
38	98·518	26·741	125·259	35·654	71·778	17·827	31·667	4·457	38
38½	100·885	27·449	128·333	36·599	73·436	18·299	32·262	4·575	38½
39	103·278	28·167	131·444	37·556	75·111	18·778	32·861	4·694	39
39½	105·700	28·894	134·593	38·525	76·806	19·263	33·465	4·816	39½
40	108·148	29·630	137·778	39·506	78·519	19·753	34·074	4·938	40
40½	110·625	30·375	141·000	40·500	80·250	20·250	34·687	5·062	40½
41	113·129	31·129	144·259	41·506	82·000	20·753	35·306	5·188	41
41½	115·663	31·894	147·556	42·525	83·769	21·263	35·928	5·316	41½
42	118·222	32·667	150·889	43·556	85·556	21·778	36·556	5·444	42
42½	120·811	33·449	154·259	44·599	87·362	22·299	37·187	5·575	42½
43	123·425	34·241	157·667	45·654	89·185	22·827	37·824	5·707	43
43½	126·069	35·042	161·111	46·722	91·028	23·361	38·465	5·840	43½
44	128·741	35·852	164·593	47·802	92·889	23·901	39·111	5·975	44
44½	131·440	36·671	168·111	48·895	94·769	24·447	39·762	6·112	44½
45	134·167	37·500	171·667	50·000	96·667	25·000	40·417	6·250	45
45½	136·921	38·338	175·259	51·117	98·583	25·559	41·076	6·390	45½
46	139·704	39·185	178·889	52·247	100·519	26·123	41·741	6·531	46
46½	142·513	40·042	182·556	53·389	102·472	26·694	42·410	6·673	46½
47	145·351	40·907	186·259	54·543	104·444	27·272	43·083	6·818	47
47½	148·218	41·782	190·000	55·709	106·436	27·855	43·762	6·964	47½
48	151·111	42·667	193·778	56·889	108·444	28·444	44·444	7·111	48
48½	154·032	43·560	197·593	58·080	110·472	29·040	45·132	7·260	48½
49	156·982	44·463	201·444	59·284	112·519	29·642	45·824	7·410	49
49½	159·958	45·375	205·333	60·500	114·583	30·250	46·521	7·562	49½
50	162·963	46·296	209·259	61·728	116·667	30·864	47·222	7·716	50
50½	165·996	47·227	213·222	62 970	118·769	31·485	47·928	7·871	50½
51	169·056	48·167	217·222	64·222	120·889	32·111	48·639	8·028	51
51½	172·144	49·116	221·259	65·488	123·028	32·744	49·354	8·186	51½
52	175·259	50·074	225·333	66·765	125·185	33·383	50·074	8·346	52
52½	178·403	51·042	229·444	68·056	127·362	34·028	50·799	8·507	52½
53	181·574	52·018	233·593	69·357	129·556	34·679	51·528	8 670	53
53½	184·773	53·004	237·778	70·672	131·769	35·336	52·262	8·834	53½
54	188·000	54·000	242·000	72·000	134·000	36·000	53·000	9·000	54
54½	191·254	55·004	246·259	73·339	136·250	36·670	53·743	9·167	54½
55	194·537	56·018	250·556	74·691	138·519	37·346	54·491	9·336	55
55½	197·847	57·042	254·889	76·056	140·806	38·028	55·243	9·507	55½
56	201·185	58·074	259 259	77·432	143·111	38·716	56·000	9·679	56
56½	204·552	59·116	263·667	78·821	145·436	39·411	56·762	9 853	56½
57	207·944	60·167	268·111	80·222	147·778	40·111	57·528	10·028	57
57½	211·366	61·227	272·593	81·636	150·139	40·818	58·299	10·204	57½
58	214·815	62·296	277·111	83·061	152·519	41·531	59·074	10·383	58
58½	218·292	63·375	281·667	84·500	154·917	42·250	59·854	10·563	58½
59	221·796	64·463	286·259	85·951	157·333	42·975	60·639	10·744	59
59½	225·329	65·560	290·889	87·413	159·769	43·707	61·428	10·927	59½
60	228·889	66·667	295·556	88·889	162·222	44·444	62·222	11·111	60

TABLE IX.—Base 14 Feet.

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	·133	·001	·134	·002	¼	20·828	4·307	25·134	5·742
½	·273	·004	·278	·005	½	21·384	4·449	25·833	5·933
¾	·420	·010	·431	·014	¾	21·948	4·594	26·542	6·125
1	·574	·018	·593	·024	16	22·519	4·741	27·259	6·321
¼	·735	·029	·764	·039	¼	23·096	4·890	27·986	6·520
½	·903	·042	·944	·056	½	23·681	5·042	28·722	6·723
¾	1·078	·057	1·134	·076	¾	24·272	5·196	29·468	6·928
2	1·259	·074	1·333	·099	17	24·870	5·352	30·222	7·136
¼	1·448	·094	1·542	·125	¼	25·476	5·510	30·986	7·347
½	1·643	·116	1·759	·155	½	26·088	5·671	31·759	7·562
¾	1·846	·140	1·986	·187	¾	26·707	5·835	32·542	7·779
3	2·056	·167	2·222	·222	18	27·333	6·000	33·333	8·000
¼	2·272	·196	2·468	·261	¼	27·966	6·168	34·134	8·224
½	2·495	·227	2·722	·303	½	28·606	6·338	34·944	8·451
¾	2·726	·260	2·986	·347	¾	29·253	6·510	35·764	8·681
4	2·963	·296	3·259	·395	19	29·907	6·685	36·593	8·913
¼	3·207	·334	3·542	·446	¼	30·568	6·862	37·431	9·150
½	3·458	·375	3·833	·500	½	31·236	7·042	38·278	9·389
¾	3·716	·418	4·134	·557	¾	31·911	7·223	39·134	9·631
5	3·981	·463	4·444	·617	20	32·593	7·407	40·000	9·877
¼	4·253	·510	4·764	·681	¼	33·281	7·594	40·875	10·125
½	4·532	·560	5·093	·747	½	33·977	7·782	41·759	10·377
¾	4·818	·612	5·431	·816	¾	34·679	7·973	42·653	10·631
6	5·111	·667	5·778	·889	21	35·389	8·167	43·556	10·889
¼	5·411	·723	6·134	·965	¼	36·105	8·362	44·468	11·150
½	5·718	·782	6·500	1·044	½	36·829	8·560	45·389	11·413
¾	6·031	·844	6·875	1·125	¾	37·559	8·760	46·319	11·681
7	6·352	·907	7·259	1·209	22	38·296	8·963	47·259	11·951
¼	6·679	·973	7·653	1·298	¼	39·041	9·168	48·208	12·224
½	7·014	1·042	8·056	1·389	½	39·792	9·375	49·167	12·500
¾	7·355	1·112	8·468	1·483	¾	40·550	9·585	50·134	12·779
8	7·704	1·185	8·889	1·580	23	41·315	9·796	51·111	13·061
¼	8·059	1·260	9·319	1·681	¼	42·087	10·010	52·097	13·347
½	8·421	1·338	9·759	1·784	½	42·866	10·227	53·093	13·636
¾	8·791	1·418	10·208	1·890	¾	43·652	10·446	54·097	13·928
9	9·167	1·500	10·667	2·000	24	44·444	10·667	55·111	14·222
¼	9·550	1·584	11·134	2·113	¼	45·244	10·890	56·134	14·520
½	9·940	1·672	11·611	2·229	½	46·051	11·116	57·167	14·821
¾	10·337	1·760	12·097	2·347	¾	46·865	11·344	58·208	15·125
10	10·741	1·852	12·593	2·470	25	47·685	11·574	59·259	15·432
¼	11·152	1·946	13·097	2·594	¼	48·513	11·807	60·319	15·742
½	11·569	2·042	13·611	2·723	½	49·347	12·042	61·389	16·056
¾	11·994	2·140	14·134	2·853	¾	50·189	12·279	62·468	16·372
11	12·426	2·241	14·667	2·988	26	51·037	12·518	63·556	16·691
¼	12·865	2·344	15·208	3·125	¼	51·892	12·760	64·653	17·014
½	13·310	2·449	15·759	3·265	½	52·755	13·004	65·759	17·339
¾	13 763	2·557	16·319	3·409	¾	53·624	13·251	66·875	17·668
12	14·222	2·667	16·889	3·556	27	54·500	13·500	68·000	18·000
¼	14·689	2·779	17·468	3·705	¼	55·383	13·751	69·134	18·335
½	15·162	2·894	18·056	3·859	½	56·273	14·004	70·278	18·672
¾	15·642	3·010	18·653	4·014	¾	57·170	14·260	71·431	19·014
13	16·130	3·129	19·259	4·173	28	58·074	14·518	72·593	19·357
¼	16·624	3·251	19·875	4·335	¼	58·985	14·779	73·764	19·705
½	17·125	3·375	20·500	4·500	½	59·903	15·042	74·944	20·056
¾	17·633	3·501	21·134	4·668	¾	60·828	15·307	76·134	20·409
14	18·148	3·630	21·778	4·839	29	61·759	15·574	77·333	20·765
¼	18·670	3·760	22·431	5·014	¼	62·698	15·844	78·542	21·125
½	19·199	3·894	23·093	5·191	½	63·643	16·116	79·759	21·488
¾	19·735	4·029	23·764	5·372	¾	64·596	16·390	80·986	21·853
15	20·278	4·167	24·444	5·556	30	65·556	16·667	82·222	22·222

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	66·522	16·946	83·468	22·594		137·216	37·918	175·134	50·557
	67·495	17·227	84·722	22·970		138·606	38·338	176·944	51·117
	68·476	17·510	85·986	23·347		140·003	38·760	178·764	51·681
31	69·463	17·796	87·259	23·728	46	141·407	39·185	180·593	52·247
	70·457	18·084	88·542	24·113		142·818	39·612	182·431	52·816
	71·458	18·375	89·833	24·500		144·236	40·042	184·278	53·389
	72·466	18·668	91·134	24·890		145·661	40·473	186·134	53·965
32	73·482	18·963	92·444	25·284	47	147·093	40·907	188·000	54·543
	74·503	19·260	93·764	25·681		148·531	41·344	189·875	55·125
	75·532	19·560	95·093	26·080		149·977	41·782	191·759	55·709
	76·568	19·862	96·431	26·483		151·429	42·223	193·653	56·298
33	77·611	20·167	97·778	26·889	48	152·889	42·667	195·556	56·889
	78·661	20·473	99·134	27·298		154·355	43·112	197·468	57·483
	79·718	20·782	100·500	27·709		155·829	43·560	199·389	58·080
	80·781	21·094	101·875	28·125		157·309	44·010	201·319	58·681
34	81·852	21·407	103·259	28·543	49	158·796	44·463	203·259	59·284
	82·929	21·723	104·653	28·965		160·290	44·918	205·208	59·890
	84·014	22·042	106·056	29·389		161·792	45·375	207·167	60·500
	85·105	22·362	107·468	29·816		163·300	45·834	209·134	61·113
35	86·204	22·685	108·889	30·247	50	164·815	46·296	211·111	61·728
	87·309	23·010	110·319	30·681		166·337	46·760	213·097	62·347
	88·421	23·338	111·759	31·117		167·866	47·227	215·092	62·970
	89·541	23·668	113·208	31·557		169·402	47·696	217·097	63·594
36	90·667	24·000	114·667	32·000	51	170·944	48·167	219·111	64·222
	91·800	24·334	116·134	32·446		172·494	48·640	221·134	64·853
	92·940	24·671	117·611	32·895		174·051	49·116	223·167	65·488
	94·087	25·010	119·097	33·347		175·615	49·594	225·208	66·125
37	95·241	25·352	120·593	33·802	52	177·185	50·074	227·259	66·765
	96·402	25·696	122·097	34·261		178·763	50·557	229·319	67·409
	97·569	26·042	123·611	34·722		180·347	51·042	231·389	68·056
	98·744	26·390	125·134	35·187		181·939	51·529	233·468	68·705
38	99·926	26·741	126·667	35·654	53	183·537	52·018	235·556	69·357
	101·115	27·094	128·208	36·125		185·142	52·510	237·653	70·014
	102·310	27·449	129·759	36·599		186·755	53·004	239·759	70·672
	103·513	27·807	131·319	37·076		188·374	53·501	241·875	71·335
39	104·722	28·167	132·889	37·556	54	190·000	54·000	244·000	72·000
	105·939	28·529	134·468	38·039		191·633	54·501	246·134	72·668
	107·162	28·894	136·056	38·525		193·273	55·004	248·278	73·339
	108·392	29·260	137·653	39·014		194·920	55·510	250·431	74·014
40	109·630	29·630	139·259	39·506	55	196·574	56·018	252·593	74·691
	110·874	30·001	140·875	40·002		198·235	56·529	254·764	75·372
	112·125	30·375	142·500	40·500		199·903	57·042	256·944	76·056
	113·383	30·751	144·134	41·002		201·578	57·557	259·134	76·742
41	114·648	31·129	145·778	41·506	56	203·259	58·074	261·333	77·432
	115·920	31·510	147·431	42·014		204·948	58·594	263·542	78·125
	117·199	31·894	149·093	42·525		206·643	59·116	265·759	78·821
	118·485	32·279	150·764	43·039		208·346	59·640	267·986	79·520
42	119·778	32·667	152·444	43·556	57	210·056	60·167	270·222	80·222
	121·078	33·057	154·134	44·076		211·772	60·696	272·468	80·928
	122·384	33·449	155·833	44·599		213·495	61·227	274·722	81·636
	123·698	33·844	157·542	45·125		215·226	61·760	276·986	82·347
43	125·019	34·241	159·259	45·654	58	216·963	62·296	279·259	83·061
	126·346	34·640	160·986	46·187		218·707	62·834	281·542	83·779
	127·681	35·042	162·722	46·722		220·458	63·375	283·833	84·500
	129·022	35·446	164·468	47·261		222·216	63·918	286·134	85·224
44	130·370	35·852	166·222	47·802	59	223·982	64·463	288·444	85·951
	131·726	36·260	167·986	48·347		225·753	65·010	290·764	86·681
	133·088	36·671	169·759	48·895		227·532	65·560	293·093	87·413
	134·457	37·085	171·542	49·446		229·318	66·112	295·431	88·150
45	135·833	37·500	173·333	50·000	60	231·111	66·667	297·778	88·889

TABLE IX.—Base 14 Feet—*continued.*

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	·132	·001	·130	·000		16·521	2·871	10·061	·718
	·269	·003	·262	·001		16·935	2·966	10·262	·741
	·410	·007	·394	·002		17·354	3·063	10·464	·766
1	·556	·012	·528	·003	16	17·778	3·161	10·667	·790
	·706	·019	·663	·005		18·206	3·260	10·871	·815
	·861	·028	·799	·007		18·639	3·361	11·076	·840
	1·021	·038	·936	·009		19·076	3·464	11·283	·866
2	1·185	·049	1·074	·012	17	19·519	3·568	11·491	·892
	1·354	·062	1·214	·016		19·965	3·674	11·700	·918
	1·528	·077	1·354	·019		20·417	3·781	11·910	·945
	1·706	·093	1·496	·023		20·873	3·890	12·121	·972
3	1·889	·111	1·639	·028	18	21·333	4·000	12·333	1·000
	2·076	·130	1·783	·033		21·799	4·112	12·547	1·028
	2·269	·151	1·928	·039		22·269	4·225	12·762	1·056
	2·465	·174	2·075	·043		22·743	4·340	12·977	1·085
4	2·667	·197	2·222	·049	19	23·222	4·457	13·194	1·114
	2·873	·223	2·371	·056		23·706	4·575	13·413	1·144
	3·083	·250	2·521	·062		24·194	4·695	13·632	1·174
	3·299	·279	2·672	·070		24·687	4·816	13·852	1·204
5	3·519	·309	2·824	·077	20	25·185	4·939	14·074	1·235
	3·743	·340	2·977	·085		25·687	5·063	14·297	1·266
	3·972	·374	3·132	·093		26·194	5·188	14·521	1·297
	4·206	·408	3·288	·102		26·706	5·316	14·746	1·329
6	4·444	·444	3·444	·111	21	27·222	5·444	14·972	1·361
	4·687	·482	3·602	·121		27·743	5·575	15·200	1·394
	4·935	·522	3·762	·130		28·269	5·707	15·428	1·427
	5·187	·562	3·922	·141		28·799	5·840	15·658	1·460
7	5·444	·605	4·083	·151	22	29·333	5·975	15·889	1·494
	5·706	·649	4·246	·162		29·873	6·112	16·121	1·528
	5·972	·695	4·410	·174		30·417	6·250	16·354	1·562
	6·243	·742	4·575	·185		30·965	6·390	16·589	1·597
8	6·519	·790	4·741	·197	23	31·519	6·531	16·824	1·633
	6·799	·840	4·908	·210		32·076	6·674	17·061	1·668
	7·083	·892	5·076	·223		32·639	6·818	17·299	1·705
	7·373	·945	5·246	·236		33·206	6·964	17·538	1·741
9	7·667	1·000	5·417	·250	24	33·778	7·111	17·778	1·778
	7·965	1·056	5·589	·264		34·354	7·260	18·019	1·815
	8·269	1·115	5·762	·279		34·935	7·411	18·262	1·853
	8·576	1·174	5·936	·293		35·521	7·563	18·505	1·891
10	8·889	1·235	6·111	·309	25	36·111	7·716	18·750	1·929
	9·206	1·297	6·288	·324		36·706	7·871	18·996	1·968
	9·528	1·361	6·465	·340		37·306	8·028	19·243	2·007
	9·854	1·427	6·644	·357		37·910	8·186	19·491	2·046
11	10·185	1·494	6·824	·373	26	38·519	8·347	19·741	2·086
	10·521	1·562	7·005	·391		39·132	8·507	19·991	2·127
	10·861	1·633	7·187	·408		39·750	8·670	20·243	2·167
	11·206	1·704	7·371	·426		40·373	8·834	20·496	2·209
12	11·556	1·778	7·556	·444	27	41·000	9·000	20·750	2·250
	11·910	1·853	7·741	·463		41·632	9·167	21·005	2·292
	12·269	1·929	7·928	·482		42·269	9·336	21·262	2·334
	12·632	2·007	8·116	·502		42·910	9·507	21·519	2·377
13	13·000	2·086	8·306	·521	28	43·556	9·679	21·778	2·420
	13·373	2·167	8·496	·542		44·206	9·853	22·038	2·463
	13·750	2·250	8·687	·562		44·861	10·028	22·299	2·507
	14·132	2·334	8·880	·584		45·521	10·204	22·561	2·551
14	14·519	2·419	9·074	·605	29	46·185	10·383	22·824	2·596
	14·910	2·507	9·269	·627		46·854	10·563	23·089	2·641
	15·306	2·596	9·465	·649		47·528	10·744	23·354	2·686
	15·706	2·686	9·663	·671		48·206	10·927	23·621	2·732
15	16·111	2·778	9·861	·694	30	48·889	11·111	23·889	2·778

TABLE IX.—Base 14 Feet—*continued.*

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	49·576	11·297	24·158	2·824		99·299	25·279	42·422	6·320
	50·269	11·485	24·428	2·871		100·269	25·559	42·762	6·390
	50·965	11·674	24·700	2·918		101·243	25·840	43·102	6·460
31	51·667	11·864	24·972	2·966	46	102·222	26·123	43·444	6·531
	52·373	12·056	25·246	3·014		103·206	26·408	43·788	6·602
	53·083	12·250	25·521	3·062		104·194	26·694	44·132	6·673
	53·799	12·445	25·797	3·111		105·187	26·982	44·477	6·746
32	54·519	12·642	26·074	3·160	47	106·185	27·272	44·824	6·818
	55·243	12·840	26·352	3·210		107·187	27·563	45·172	6·891
	55·972	13·040	26·632	3·260		108·194	27·855	45·521	6·964
	56·706	13·242	26·913	3·310		109·206	28·149	45·871	7·037
33	57·444	13·444	27·194	3·361	48	110·222	28·444	46·222	7·111
	58·187	13·649	27·477	3·412		111·243	28·742	46·575	7·185
	58·935	13·855	27·762	3·464		112·269	29·040	46·928	7·260
	59·687	14·062	28·047	3·516		113·299	29·340	47·283	7·335
34	60·444	14·272	28·333	3·568	49	114·333	29·642	47·639	7·410
	61·206	14·482	28·621	3·621		115·373	29·945	47·996	7·486
	61·972	14·694	28·910	3·674		116·417	30·250	48·354	7·562
	62·743	14·908	29·200	3·727		117·465	30·556	48·714	7·639
35	63·519	15·123	29·491	3·781	50	118·519	30·864	49·074	7·716
	64·299	15·340	29·783	3·835		119·576	31·174	49·436	7·793
	65·083	15·559	30·076	3·890		120·639	31·485	49·799	7·871
	65·873	15·779	30·371	3·945		121·706	31·797	50·163	7·949
36	66·667	16·000	30·667	4·000	51	122·778	32·111	50·528	8·028
	67·465	16·223	30·964	4·056		123·854	32·427	50·894	8·107
	68·269	16·447	31·262	4·112		124·935	32·744	51·262	8·186
	69·076	16·674	31·561	4·168		126·021	33·063	51·630	8·266
37	69·889	16·901	31·861	4·225	52	127·111	33·383	52·000	8·346
	70·706	17·130	32·163	4·283		128·206	33·704	52·371	8·426
	71·528	17·361	32·465	4·340		129·306	34·028	52·743	8·507
	72·354	17·593	32·769	4·398		130·410	34·353	53·116	8·588
38	73·185	17·827	33·074	4·457	53	131·519	34·679	53·491	8·670
	74·021	18·062	33·380	4·516		132·632	35·007	53·866	8·752
	74·861	18·299	33·687	4·575		133·750	35·336	54·243	8·834
	75·706	18·538	33·996	4·634		134·873	35·667	54·621	8·917
39	76·556	18·778	34·306	4·694	54	136·000	36·000	55·000	9·000
	77·410	19·019	34·616	4·755		137·132	36·334	55·380	9·084
	78·269	19·263	34·928	4·816		138·269	36·670	55·762	9·167
	79·132	19·507	35·241	4·877		139·410	37·007	56·144	9·252
40	80·000	19·753	35·556	4·938	55	140·556	37·346	56·528	9·336
	80·873	20·001	35·871	5·000		141·706	37·686	56·913	9·421
	81·750	20·250	36·187	5·062		142·861	38·028	57·299	9·507
	82·632	20·501	36·505	5·125		144·021	38·371	57·686	9·593
41	83·519	20·753	36·824	5·188	56	145·185	38·716	58·074	9·679
	84·410	21·007	37·144	5·252		146·354	39·063	58·464	9·766
	85·306	21·263	37·465	5·316		147·528	39·411	58·854	9·853
	86·206	21·519	37·788	5·380		148·706	39·760	59·246	9·940
42	87·111	21·778	38·111	5·444	57	149·889	40·111	59·639	10·028
	88·021	22·038	38·436	5·509		151·076	40·464	60·033	10·116
	88·935	22·299	38·762	5·575		152·269	40·818	60·428	10·204
	89·854	22·563	39·089	5·641		153·465	41·174	60·825	10·293
43	90·778	22·827	39·417	5·707	58	154·667	41·531	61·222	10·383
	91·706	23·093	39·746	5·773		155·873	41·890	61·621	10·472
	92·639	23·361	40·076	5·840		157·083	42·250	62·021	10·563
	93·576	23·630	40·408	5·908		158·299	42·612	62·422	10·653
44	94·519	23·901	40·741	5·975	59	159·519	42·975	62·824	10·744
	95·465	24·174	41·075	6·043		160·743	43·340	63·227	10·835
	96·417	24·447	41·410	6·112		161·972	43·707	63·632	10·927
	97·373	24·723	41·746	6·181		163·206	44·075	64·038	10·019
45	98·333	25·000	42·083	6·250	60	164·444	44·444	64·444	11·111

TABLE X.—Base 15 Feet.

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	·142	·001	·144	·002	¼	21·392	4·307	25·699	5·742
½	·292	·004	·296	·005	½	21·958	4·449	26·407	5·933
¾	·448	·010	·458	·014	¾	22·531	4·594	27·125	6·125
1	·611	·018	·630	·024	16	23·111	4·741	27·852	6·321
¼	·781	·029	·810	·039	¼	23·698	4·890	28·588	6·520
½	·958	·042	1·000	·056	½	24·292	5·042	29·333	6·723
¾	1·142	·057	1·199	·076	¾	24·892	5·196	30·088	6·928
2	1·333	·074	1·407	·099	17	25·500	5·352	30·852	7·136
¼	1·531	·094	1·625	·125	¼	26·115	5·510	31·625	7·347
½	1·736	·116	1·852	·155	½	26·736	5·671	32·407	7·562
¾	1·948	·140	2·088	·187	¾	27·365	5·835	33·199	7·779
3	2·167	·167	2·333	·222	18	28·000	6·000	34·000	8·000
¼	2·392	·196	2·588	·261	¼	28·642	6·168	34·810	8·224
½	2·625	·227	2·852	·303	½	29·292	6·338	35·630	8·451
¾	2·865	·260	3·125	·347	¾	29·948	6·510	36·458	8·681
4	3·111	·296	3·407	·395	19	30·611	6·685	37·296	8·913
¼	3·365	·334	3·699	·446	¼	31·281	6·862	38·144	9·150
½	3·625	·375	4·000	·500	½	31·958	7·042	39·000	9·389
¾	3·892	·418	4·310	·557	¾	32·642	7·223	39·866	9·631
5	4·167	·463	4·630	·617	20	33·333	7·407	40·741	9·877
¼	4·448	·510	4·958	·681	¼	34·031	7·594	41·625	10·125
½	4·736	·560	5·296	·747	½	34·736	7·782	42·518	10·377
¾	5·031	·612	5·644	·816	¾	35·448	7·973	43·421	10·631
6	5·333	·667	6·000	·889	21	36·167	8·167	44·333	10·889
¼	5·642	·723	6·366	·965	¼	36·892	8·362	45·255	11·150
½	5·958	·782	6·741	1·044	½	37·625	8·560	46·185	11·413
¾	6·281	·844	7·125	1·125	¾	38·365	8·760	47·125	11·681
7	6·611	·907	7·518	1·209	22	39·111	8·963	48·074	11·951
¼	6·948	·973	7·921	1·298	¼	39·865	9·168	49·032	12·224
½	7·292	1·042	8·333	1·389	½	40·625	9·375	50·000	12·500
¾	7·642	1·112	8·755	1·483	¾	41·392	9·585	50·977	12·779
8	8·000	1·185	9·185	1·580	23	42·167	9·796	51·963	13·061
¼	8·365	1·260	9·625	1·681	¼	42·948	10·010	52·958	13·347
½	8·736	1·338	10·074	1·784	½	43·736	10·227	53·963	13·636
¾	9·115	1·418	10·532	1·890	¾	44·531	10·446	54·977	13·928
9	9·500	1·500	11·000	2·000	24	45·333	10·667	56·000	14·222
¼	9·892	1·584	11·477	2·113	¼	46·142	10·890	57·032	14·520
½	10·292	1·672	11·963	2·229	½	46·958	11·116	58·074	14·821
¾	10·698	1·760	12·458	2·347	¾	47·781	11·344	59·125	15·125
10	11·111	1·852	12·963	2·470	25	48·611	11·574	60·185	15·432
¼	11·531	1·946	13·477	2·594	¼	49·448	11·807	61·255	15·742
½	11·958	2·042	14·000	2·723	½	50·292	12·042	62·333	16·056
¾	12·392	2·140	14·532	2·853	¾	51·142	12·279	63·421	16·372
11	12·833	2·241	15·074	2·988	26	52·000	12·518	64·518	16·691
¼	13·281	2·344	15·625	3·125	¼	52·865	12·760	65·625	17·014
½	13·736	2·449	16·185	3·265	½	53·736	13·004	66·741	17·339
¾	14·198	2·557	16·755	3·409	¾	54·615	13·251	67·866	17·668
12	14·667	2·667	17·333	3·556	27	55·500	13·500	69·000	18·000
¼	15·142	2·779	17·921	3·705	¼	56·392	13·751	70·144	18·335
½	15·625	2·894	18·518	3·859	½	57·292	14·004	71·296	18·672
¾	16·115	3·010	19·125	4·014	¾	58·198	14·260	72·458	19·014
13	16·611	3·129	19·741	4·173	28	59·111	14·518	73·630	19·357
¼	17·115	3·251	20·366	4·335	¼	60·031	14·779	74·810	19·705
½	17·625	3·375	21·000	4·500	½	60·958	15·042	76·000	20·056
¾	18·142	3·501	21·644	4·668	¾	61·892	15·307	77·199	20·409
14	18·667	3·630	22·296	4·839	29	62·833	15·574	78·407	20·765
¼	19·198	3·760	22·958	5·014	¼	63·781	15·844	79·625	21·125
½	19·736	3·894	23·630	5·191	½	64·736	16·116	80·852	21·488
¾	20·281	4·029	24·310	5·372	¾	65·698	16·390	82·088	21·853
15	20·833	4·167	25·000	5·556	30	66·667	16·667	83·333	22·222

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	67·642	16·946	84·588	22·594		138·892	37·918	176·810	50·557
	68·625	17·227	85·852	22·970		140·292	38·338	178·630	51·117
	69·615	17·510	87·125	23·347		141·698	38·760	180·458	51·681
31	70·611	17·796	88·407	23·728	46	143·111	39·185	182·296	52·247
	71·615	18·084	89·699	24·113		144·531	39·612	184·144	52·816
	72·625	18·375	91·000	24·500		145·958	40·042	186·000	53·389
	73·642	18·668	92·310	24·890		147·392	40·473	187·866	53·965
32	74·667	18·963	93·630	25·284	47	148·833	40·907	189·741	54·543
	75·698	19·260	94·958	25·681		150·281	41·344	191·625	55·125
	76·736	19·560	96·296	26·080		151·736	41·782	193·518	55·709
	77·781	19·862	97·644	26·483		153·198	42·223	195·421	56·298
33	78·833	20·167	99·000	26·889	48	154·667	42·667	197·333	56·889
	79·892	20·473	100·366	27·298		156·142	43·112	199·255	57·483
	80·958	20·782	101·741	27·709		157·625	43·560	201·185	58·080
	82·031	21·094	103·125	28·125		159·115	44·010	203·125	58·681
34	83·111	21·407	104·518	28·543	49	160·611	44·463	205·074	59·284
	84·198	21·723	105·921	28·965		162·115	44·918	207·032	59·890
	85·292	22·042	107·333	29·389		163·625	45·375	209·000	60·500
	86·392	22·362	108·755	29·816		165·142	45·834	210·977	61·113
35	87·500	22·685	110·185	30·247	50	166·667	46·296	212·963	61·728
	88·615	23·010	111·625	30·681		168·198	46·760	214·958	62·347
	89·736	23·338	113·074	31·117		169·736	47·227	216·963	62·970
	90·865	23·668	114·532	31·557		171·281	47·696	218·977	63·594
36	92·000	24·000	116·000	32·000	51	172·833	48·167	221·000	64·222
	93·142	24·334	117·477	32·446		174·392	48·640	223·032	64·853
	94·292	24·671	118·963	32·895		175·958	49·116	225·074	65·488
	95·448	25·010	120·458	33·347		177·531	49·594	227·125	66·125
37	96·611	25·352	121·963	33·802	52	179·111	50·074	229·185	66·765
	97·781	25·696	123·477	34·261		180·698	50·557	231·255	67·409
	98·958	26·042	125·000	34·722		182·292	51·042	233·333	68·056
	100·142	26·390	126·532	35·187		183·892	51·529	235·421	68·705
38	101·333	26·741	128·074	35·654	53	185·500	52·018	237·518	69·357
	102·531	27·094	129·625	36·125		187·115	52·510	239·625	70·014
	103·736	27·449	131·185	36·599		188·736	53·004	241·741	70·672
	104·948	27·807	132·755	37·076		190·365	53·501	243·866	71·335
39	106·167	28·167	134·333	37·556	54	192·000	54·000	246·000	72·000
	107·392	28·529	135·921	38·039		193·642	54·501	248·144	72·668
	108·625	28·894	137·518	38·525		195·292	55·004	250·296	73·339
	109·865	29·260	139·125	39·014		196·948	55·510	252·458	74·014
40	111·111	29·630	140·741	39·506	55	198·611	56·018	254·630	74·691
	112·365	30·001	142·366	40·002		200·281	56·529	256·810	75·372
	113·625	30·375	144·000	40·500		201·958	57·042	259·000	76·056
	114·892	30·751	145·644	41·002		203·642	57·557	261·199	76·742
41	116·167	31·129	147·296	41·506	56	205·333	58·074	263·407	77·432
	117·448	31·510	148·958	42·014		207·031	58·594	265·625	78·125
	118·736	31·894	150·630	42·525		208·736	59·116	267·852	78·821
	120·031	32·279	152·310	43·039		210·448	59·640	270·088	79·520
42	121·333	32·667	154·000	43·556	57	212·167	60·167	272·333	80·222
	122·642	33·057	155·699	44·076		213·892	60·696	274·588	80·928
	123·958	33·449	157·407	44·599		215·625	61·227	276·852	81·636
	125·281	33·844	159·125	45·125		217·365	61·760	279·125	82·347
43	126·611	34·241	160·852	45·654	58	219·111	62·296	281·407	83·061
	127·948	34·640	162·588	46·187		220·865	62·834	283·699	83·779
	129·292	35·042	164·333	46·722		222·625	63·375	286·000	84·500
	130·642	35·446	166·088	47·261		224·392	63·918	288·310	85·224
44	132·000	35·852	167·852	47·802	59	226·167	64·463	290·630	85·951
	133·365	36·260	169·625	48·347		227·948	65·010	292·958	86·681
	134·736	36·671	171·407	48·895		229·736	65·560	295·296	87·413
	136·115	37·085	173·199	49·446		231·531	66·112	297·644	88·150
45	137·500	37·500	175·000	50·000	60	233·333	66·667	300·000	88·889

TABLE X.—Base 15 Feet—*continued.*

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	·141	·001	·139	·000	¼	17·086	2·871	10·626	·718
½	·287	·003	·280	·001	½	17·509	2·966	10·835	·741
¾	·437	·007	·422	·002	¾	17·937	3·063	11·047	·766
1	·593	·012	·565	·003	16	18·371	3·161	11·259	·790
¼	·752	·019	·709	·005	¼	18·808	3·260	11·473	·815
½	·917	·028	·854	·007	½	19·250	3·361	11·687	·840
¾	1·086	·038	1·001	·009	¾	19·697	3·464	11·903	·866
2	1·259	·049	1·148	·012	17	20·148	3·568	12·120	·892
¼	1·437	·062	1·297	·016	¼	20·604	3·674	12·339	·918
½	1·620	·077	1·447	·019	½	21·064	3·781	12·558	·945
¾	1·808	·093	1·598	·023	¾	21·530	3·890	12·778	·972
3	2·000	·111	1·750	·028	18	22·000	4·000	13·000	1·000
¼	2·197	·130	1·903	·033	¼	22·475	4·112	13·223	1·028
½	2·398	·151	2·058	·039	½	22·954	4·225	13·447	1·056
¾	2·604	·174	2·214	·043	¾	23·437	4·340	13·672	1·085
4	2·815	·197	2·370	·049	19	23·926	4·457	13·898	1·114
¼	3·030	·223	2·528	·056	¼	24·419	4·575	14·126	1·144
½	3·250	·250	2·688	·062	½	24·917	4·695	14·354	1·174
¾	3·475	·279	2·848	·070	¾	25·419	4·816	14·584	1·204
5	3·704	·309	3·009	·077	20	25·926	4·939	14·815	1·235
¼	3·937	·340	3·172	·085	¼	26·437	5·063	15·047	1·266
½	4·176	·374	3·336	·093	½	26·954	5·188	15·280	1·297
¾	4·419	·408	3·501	·102	¾	27·475	5·316	15·514	1·329
6	4·667	·444	3·667	·111	21	28·000	5·444	15·750	1·361
¼	4·919	·482	3·834	·121	¼	28·530	5·575	15·987	1·394
½	5·176	·522	4·002	·130	½	29·064	5·707	16·224	1·427
¾	5·437	·562	4·172	·141	¾	29·604	5·840	16·464	1·460
7	5·704	·605	4·343	·151	22	30·148	5·975	16·704	1·494
¼	5·975	·649	4·514	·162	¼	30·697	6·112	16·945	1·528
½	6·250	·695	4·687	·174	½	31·250	6·250	17·188	1·562
¾	6·530	·742	4·862	·185	¾	31·808	6·390	17·431	1·597
8	6·815	·790	5·037	·197	23	32·371	6·531	17·676	1·633
¼	7·104	·840	5·214	·210	¼	32·937	6·674	17·922	1·668
½	7·398	·892	5·391	·223	½	33·509	6·818	18·169	1·705
¾	7·697	·945	5·570	·236	¾	34·086	6·964	18·417	1·741
9	8·000	1·000	5·750	·250	24	34·667	7·111	18·667	1·778
¼	8·308	1·056	5·931	·264	¼	35·252	7·260	18·917	1·815
½	8·620	1·115	6·113	·279	½	35·842	7·411	19·169	1·853
¾	8·937	1·174	6·297	·293	¾	36·437	7·563	19·422	1·891
10	9·259	1·235	6·481	·309	25	37·037	7·716	19·676	1·929
¼	9·586	1·297	6·667	·324	¼	37·641	7·871	19·931	1·968
½	9·917	1·361	6·854	·340	½	38·250	8·028	20·188	2·007
¾	10·252	1·427	7·042	·357	¾	38·863	8·186	20·445	2·046
11	10·593	1·494	7·232	·373	26	39·482	8·347	20·704	2·086
¼	10·937	1·562	7·422	·391	¼	40·104	8·507	20·964	2·127
½	11·287	1·633	7·613	·408	½	40·731	8·670	21·225	2·167
¾	11·641	1·704	7·806	·426	¾	41·363	8·834	21·487	2·209
12	12·000	1·778	8·000	·444	27	42·000	9·000	21·751	2·250
¼	12·363	1·853	8·195	·463	¼	42·641	9·167	22·014	2·292
½	12·731	1·929	8·391	·482	½	43·287	9·336	22·281	2·334
¾	13·104	2·007	8·589	·502	¾	43·937	9·507	22·547	2·377
13	13·482	2·086	8·787	·521	28	44·593	9·679	22·816	2·420
¼	13·863	2·167	8·987	·542	¼	45·252	9·853	23·084	2·463
½	14·250	2·250	9·187	·562	½	45·917	10·028	23·355	2·507
¾	14·641	2·334	9·389	·584	¾	46·586	10·204	23·626	2·551
14	15·037	2·419	9·593	·605	29	47·259	10·383	23·899	2·596
¼	15·437	2·507	9·797	·627	¼	47·937	10·563	24·172	2·641
½	15·842	2·596	10·002	·649	½	48·620	10·744	24·447	2·686
¾	16·252	2·686	10·209	·671	¾	49·308	10·927	24·723	2·732
15	16·667	2·778	10·417	·694	30	50·000	11·111	25·000	2·778

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	50·697	11·297	25·278	2·824		100·975	25·279	44·098	6·320
	51·398	11·485	25·558	2·871		101·954	25·559	44·447	6·390
	52·104	11·674	25·839	2·918		102·937	25·840	44·797	6·460
31	52·815	11·864	26·120	2·966	46	103·926	26·123	45·148	6·531
	53·530	12·056	26·403	3·014		104·919	26·408	45·501	6·602
	54·250	12·250	26·687	3·062		105·917	26·694	45·854	6·673
	54·975	12·445	26·973	3·111		106·919	26·982	46·209	6·746
32	55·704	12·642	27·259	3·160	47	107·926	27·272	46·565	6·818
	56·437	12·840	27·547	3·210		108·937	27·563	46·922	6·891
	57·176	13·040	27·836	3·260		109·954	27·855	47·280	6·964
	57·919	13·242	28·126	3·310		110·975	28·149	47·639	7·037
33	58·667	13·444	28·417	3·361	48	112·000	28·444	48·000	7·111
	59·419	13·649	28·709	3·412		113·030	28·742	48·362	7·185
	60·176	13·855	29·002	3·464		114·064	29·040	48·724	7·260
	60·937	14·062	29·297	3·516		115·104	29·340	49·089	7·335
34	61·704	14·272	29·593	3·568	49	116·148	29·642	49·454	7·410
	62·475	14·482	29·889	3·621		117·197	29·945	49·820	7·486
	63·250	14·694	30·187	3·674		118·250	30·250	50·187	7·562
	64·030	14·908	30·487	3·727		119·308	30·556	50·556	7·639
35	64·815	15·123	30·787	3·781	50	120·371	30·864	50·926	7·716
	65·604	15·340	31·089	3·835		121·437	31·174	51·297	7·793
	66·398	15·559	31·391	3·890		122·509	31·485	51·669	7·871
	67·197	15·779	31·695	3·945		123·586	31·797	52·042	7·949
36	68·000	16·000	32·000	4·000	51	124·667	32·111	52·417	8·028
	68·808	16·223	32·306	4·056		125·752	32·427	52·792	8·107
	69·620	16·447	32·613	4·112		126·842	32·744	53·168	8·186
	70·437	16·674	32·922	4·168		127·937	33·063	53·547	8·266
37	71·259	16·901	33·232	4·225	52	129·037	33·383	53·926	8·346
	72·086	17·130	33·542	4·283		130·141	33·704	54·306	8·426
	72·917	17·361	33·854	4·340		131·250	34·028	54·687	8·507
	73·752	17·593	34·167	4·398		132·363	34·353	55·070	8·588
38	74·593	17·827	34·482	4·457	53	133·482	34·679	55·454	8·670
	75·437	18·062	34·797	4·516		134·604	35·007	55·839	8·752
	76·287	18·299	35·113	4·575		135·731	35·336	56·224	8·834
	77·141	18·538	35·431	4·634		136·863	35·667	56·612	8·917
39	78·000	18·778	35·750	4·694	54	138·000	36·000	57·000	9·000
	78·863	19·019	36·070	4·755		139·141	36·334	57·389	9·084
	79·731	19·263	36·391	4·816		140·287	36·670	57·780	9·167
	80·604	19·507	36·714	4·877		141·437	37·007	58·172	9·252
40	81·482	19·753	37·037	4·938	55	142·593	37·346	58·565	9·336
	82·363	20·001	37·362	5·000		143·752	37·686	58·959	9·421
	83·250	20·250	37·687	5·062		144·917	38·028	59·354	9·507
	84·141	20·501	38·014	5·125		146·086	38·371	59·751	9·593
41	85·037	20·753	38·343	5·188	56	147·259	38·716	60·147	9·679
	85·937	21·007	38·672	5·252		148·437	39·063	60·547	9·766
	86·842	21·263	39·002	5·316		149·620	39·411	60·947	9·853
	87·752	21·519	39·334	5·380		150·808	39·760	61·348	9·940
42	88·667	21·778	39·667	5·444	57	152·000	40·111	61·750	10·028
	89·586	22·038	40·001	5·509		153·197	40·464	62·153	10·116
	90·509	22·299	40·335	5·575		154·398	40·818	62·558	10·204
	91·437	22·563	40·672	5·641		155·604	41·174	62·964	10·293
43	92·371	22·827	41·009	5·707	58	156·815	41·531	63·370	10·383
	93·308	23·093	41·348	5·773		158·030	41·890	63·778	10·472
	94·250	23·361	41·687	5·840		159·250	42·250	64·188	10·563
	95·197	23·630	42·028	5·908		160·475	42·612	64·598	10·653
44	96·148	23·901	42·370	5·975	59	161·704	42·975	65·009	10·744
	97·104	24·174	42·714	6·043		162·937	43·340	65·422	10·835
	98·064	24·447	43·058	6·112		164·176	43·707	65·836	10·927
	99·030	24·723	43·403	6·181		165·419	44·075	66·251	11·019
45	100·000	25·000	43·750	6·250	60	166·667	44·444	66·667	11·111

TABLE XI.—Base 16 Feet.

Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	·151	·001	·153	·002
½	·310	·004	·315	·005
¾	·475	·010	·486	·014
1	·648	·018	·667	·024
1¼	·828	·029	·856	·039
1½	1·013	·042	1·056	·056
1¾	1·207	·057	1·264	·076
2	1·407	·074	1·481	·099
2¼	1·615	·094	1·708	·125
2½	1·829	·116	1·944	·155
2¾	2·050	·140	2·190	·187
3	2·278	·167	2·444	·222
3¼	2·513	·196	2·708	·261
3½	2·754	·227	2·981	·303
3¾	3·003	·260	3·264	·347
4	3·259	·296	3·556	·395
4¼	3·521	·334	3·856	·446
4½	3·791	·375	4·167	·500
4¾	4·068	·418	4·486	·557
5	4·351	·463	4·815	·617
5¼	4·642	·510	5·153	·681
5½	4·940	·560	5·500	·747
5¾	5·244	·612	5·856	·816
6	5·556	·667	6·222	·889
6¼	5·873	·723	6·597	·965
6½	6·199	·782	6·981	1·044
6¾	6·531	·844	7·375	1·125
7	6·870	·907	7·778	1·209
7¼	7·216	·973	8·190	1·298
7½	7·569	1·042	8·611	1·389
7¾	7·929	1·112	9·042	1·483
8	8·296	1·185	9·481	1·580
8¼	8·670	1·260	9·931	1·681
8½	9·050	1·338	10·389	1·784
8¾	9·439	1·418	10·856	1·890
9	9·833	1·500	11·333	2·000
9¼	10·234	1·584	11·819	2·113
9½	10·644	1·672	12·315	2·229
9¾	11·059	1·760	12·819	2·347
10	11·481	1·852	13·333	2·470
10¼	11·911	1·946	13·856	2·594
10½	12·346	2·042	14·389	2·723
10¾	12·790	2·140	14·931	2·853
11	13·240	2·241	15·481	2·988
11¼	13·698	2·344	16·042	3·125
11½	14·162	2·449	16·611	3·265
11¾	14·633	2·557	17·190	3·409
12	15·111	2·667	17·778	3·556
12¼	15·596	2·779	18·375	3·705
12½	16·086	2·894	18·981	3·859
12¾	16·586	3·010	19·597	4·014
13	17·093	3·129	20·222	4·173
13¼	17·605	3·251	20·856	4·335
13½	18·125	3·375	21·500	4·500
13¾	18·651	3·501	22·153	4·668
14	19·185	3·630	22·815	4·839
14¼	19·725	3·760	23·486	5·014
14½	20·272	3·894	24·167	5·191
14¾	20·828	4·029	24·856	5·372
15	21·389	4·167	25·556	5·556

Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	21·957	4·307	26·264	5·742
½	22·532	4·449	26·981	5·933
¾	23·115	4·594	27·708	6·125
16	23·703	4·741	28·444	6·321
¼	24·300	4·890	29·190	6·520
½	24·902	5·042	29·944	6·723
¾	25·513	5·196	30·708	6·928
17	26·130	5·352	31·481	7·136
¼	26·753	5·510	32·264	7·347
½	27·384	5·671	33·056	7·562
¾	28·022	5·835	33·856	7·779
18	28·667	6·000	34·667	8·000
¼	29·318	6·168	35·486	8·224
½	29·976	6·338	36·315	8·451
¾	30·642	6·510	37·153	8·681
19	31·315	6·685	38·000	8·913
¼	31·994	6·862	38·856	9·150
½	32·681	7·042	39·722	9·389
¾	33·373	7·223	40·597	9·631
20	34·074	7·407	41·481	9·877
¼	34·781	7·594	42·375	10·125
½	35·496	7·782	43·278	10·377
¾	36·216	7·973	44·190	10·631
21	36·944	8·167	45·111	10·889
¼	37·679	8·362	46·042	11·150
½	38·420	8·560	46·981	11·413
¾	39·170	8·760	47·931	11·681
22	39·926	8·963	48·889	11·951
¼	40·689	9·168	49·856	12·224
½	41·458	9·375	50·833	12·500
¾	42·235	9·585	51·819	12·779
23	43·019	9·796	52·815	13·061
¼	43·809	10·010	53·819	13·347
½	44·606	10·227	54·833	13·636
¾	45·411	10·446	55·856	13·928
24	46·222	10·667	56·889	14·222
¼	47·040	10·890	57·931	14·520
½	47·865	11·116	58·981	14·821
¾	48·698	11·344	60·042	15·125
25	49·536	11·574	61·111	15·432
¼	50·383	11·807	62·190	15·742
½	51·235	12·042	63·278	16·056
¾	52·096	12·279	64·375	16·372
26	52·962	12·518	65·481	16·691
¼	53·836	12·760	66·597	17·014
½	54·717	13·004	67·722	17·339
¾	55·605	13·251	68·856	17·668
27	56·500	13·500	70·000	18·000
¼	57·401	13·751	71·153	18·335
½	58·310	14·004	72·315	18·672
¾	59·225	14·260	73·486	19·014
28	60·148	14·518	74·667	19·357
¼	61·078	14·779	75·856	19·705
½	62·013	15·042	77·056	20·056
¾	62·957	15·307	78·264	20·409
29	63·907	15·574	79·481	20·765
¼	64·865	15·844	80·708	21·125
½	65·829	16·116	81·944	21·488
¾	66·800	16·390	83·190	21·853
30	67·778	16·667	84·444	22·222

TABLE XI.—Base 16 Feet.

Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	68·763	16·946	85·708	22·594
	69·754	17·227	86·981	22·970
	70·753	17·510	88·264	23·347
31	71·759	17·796	89·556	23·728
	72·771	18·084	90·856	24·113
	73·791	18·375	92·167	24·500
	74·818	18·668	93·486	24·890
32	75·851	18·963	94·815	25·284
	76·892	19·260	96·153	25·681
	77·940	19·560	97·500	26·080
	78·994	19·862	98·856	26·483
33	80·056	20·167	100·222	26·889
	81·123	20·473	101·597	27·298
	82·199	20·782	102·981	27·709
	83·281	21·094	104·375	28·125
34	84·370	21·407	105·778	28·543
	85·466	21·723	107·190	28·965
	86·569	22·042	108·611	29·389
	87·679	22·362	110·042	29·816
35	88·796	22·685	111·481	30·247
	89·920	23·010	112·931	30·681
	91·050	23·338	114·389	31·117
	92·189	23·668	115·856	31·557
36	93·333	24·000	117·333	32·000
	94·484	24·334	118·819	32·446
	95·644	24·671	120·315	32·895
	96·809	25·010	121·819	33·347
37	97·981	25·352	123·333	33·802
	99·161	25·696	124·856	34·261
	100·346	26·042	126·389	34·722
	101·540	26·390	127·931	35·187
38	102·740	26·741	129·481	35·654
	103·948	27·094	131·042	36·125
	105·162	27·449	132·611	36·599
	106·383	27·807	134·190	37·076
39	107·611	28·167	135·778	37·556
	108·846	28·529	137·375	38·039
	110·086	28·894	138·981	38·525
	111·336	29·260	140·597	39·014
40	112·593	29·630	142·222	39·506
	113·855	30·001	143·856	40·002
	115·125	30·375	145·500	40·500
	116·401	30·751	147·153	41·002
41	117·685	31·129	148·815	41·506
	118·975	31·510	150·486	42·014
	120·272	31·894	152·167	42·525
	121·578	32·279	153·856	43·039
42	122·889	32·667	155·556	43·556
	124·207	33·057	157·264	44·076
	125·532	33·449	158·981	44·599
	126·865	33·844	160·708	45·125
43	128·203	34·241	162·444	45·654
	129·550	34·640	164·190	46·187
	130·902	35·042	165·944	46·722
	132·263	35·446	167·708	47·261
44	133·630	35·852	169·481	47·802
	135·003	36·260	171·264	48·347
	136·384	36·671	173·056	48·895
	137·772	37·085	174·856	49·446
45	139·167	37·500	176·667	50·000

Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	140·568	37·918	178·486	50·557
	141·976	38·338	180·315	51·117
	143·392	38·760	182·153	51·681
46	144·815	39·185	184·000	52·247
	146·244	39·612	185·856	52·816
	147·681	40·042	187·722	53·389
	149·123	40·473	189·597	53·965
47	150·574	40·907	191·481	54·543
	152·031	41·344	193·375	55·125
	153·496	41·782	195·278	55·709
	154·966	42·223	197·190	56·298
48	156·444	42·667	199·111	56·889
	157·929	43·112	201·042	57·483
	159·420	43·560	202·981	58·080
	160·920	44·010	204·931	58·681
49	162·426	44·463	206·889	59·284
	163·939	44·918	208·856	59·890
	165·458	45·375	210·833	60·500
	166·984	45·834	212·819	61·113
50	168·519	46·296	214·815	61·728
	170·059	46·760	216·819	62·347
	171·606	47·227	218·833	62·970
	173·161	47·696	220·856	63·594
51	174·722	48·167	222·889	64·222
	176·290	48·640	224·931	64·853
	177·865	49·116	226·981	65·488
	179·448	49·594	229·042	66·125
52	181·036	50·074	231·111	66·765
	182·633	50·557	233·190	67·409
	184·235	51·042	235·278	68·056
	185·846	51·529	237·375	68·705
53	187·462	52·018	239·481	69·357
	189·086	52·510	241·597	70·014
	190·717	53·004	243·722	70·672
	192·355	53·501	245·856	71·335
54	194·000	54·000	248·000	72·000
	195·651	54·501	250·153	72·668
	197·310	55·004	252·315	73·339
	198·975	55·510	254·486	74·014
55	200·648	56·018	256·667	74·691
	202·328	56·529	258·856	75·372
	204·013	57·042	261·056	76·056
	205·707	57·557	263·264	76·742
56	207·407	58·074	265·481	77·432
	209·115	58·594	267·708	78·125
	210·829	59·116	269·944	78·821
	212·550	59·640	272·190	79·520
57	214·278	60·167	274·444	80·222
	216·013	60·696	276·708	80·928
	217·754	61·227	278·981	81·636
	219·503	61·760	281·264	82·347
58	221·259	62·296	283·556	83·061
	223·021	62·834	285·856	83·779
	224·791	63·375	288·167	84·500
	226·568	63·918	290·486	85·224
59	228·351	64·463	292·815	85·951
	230·142	65·010	295·153	86·681
	231·940	65·560	297·500	87·413
	233·744	66·112	299·856	88·150
60	235·556	66·667	302·222	88·889

TABLE XI.—Base 16 Feet—*continued.*

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights	Centre and Slopes.	Add half difference of heights.
¼	·150	·001	·149	·000	¼	17·650	2·871	11·190	·718
½	·306	·003	·299	·001	½	18·082	2·966	11·410	·741
¾	·465	·007	·450	·002	¾	18·521	3·063	11·630	·766
1	·630	·012	·602	·003	16	18·963	3·161	11·852	·790
¼	·799	·019	·755	·005	¼	19·410	3·260	12·075	·815
½	·973	·028	·910	·007	½	19·861	3·361	12·299	·840
¾	1·150	·038	1·065	·009	¾	20·317	3·464	12·524	·866
2	1·333	·049	1·222	·012	17	20·778	3·568	12·750	·892
¼	1·521	·062	1·380	·016	¼	21·243	3·674	12·977	·918
½	1·712	·077	1·539	·019	½	21·712	3·781	13·206	·945
¾	1·910	·093	1·700	·023	¾	22·187	3·890	13·436	·972
3	2·111	·111	1·861	·028	18	22·667	4·000	13·667	1·000
¼	2·317	·130	2·024	·033	¼	23·150	4·112	13·899	1·028
½	2·527	·151	2·187	·039	½	23·639	4·225	14·132	1·056
¾	2·743	·174	2·352	·043	¾	24·132	4·340	14·366	1·085
4	2·963	·197	2·519	·049	19	24·630	4·457	14·602	1·114
¼	3·187	·223	2·686	·056	¼	25·132	4·575	14·839	1·144
½	3·417	·250	2·854	·062	½	25·639	4·695	15·076	1·174
¾	3·650	·279	3·024	·070	¾	26·150	4·816	15·315	1·204
5	3·889	·309	3·194	·077	20	26·667	4·939	15·556	1·235
¼	4·132	·340	3·366	·085	¼	27·187	5·063	15·797	1·266
½	4·380	·374	3·539	·093	½	27·712	5·188	16·039	1·297
¾	4·632	·408	3·714	·102	¾	28·243	5·316	16·283	1·329
6	4·889	·444	3·889	·111	21	28·778	5·444	16 528	1·361
¼	5·150	·482	4·065	·121	¼	29·317	5·575	16·774	1·394
½	5·417	·522	4·243	·130	½	29·861	5·707	17·021	1·427
¾	5·687	·562	4·422	·141	¾	30·410	5·840	17·269	1·460
7	5·963	·605	4·602	·151	22	30·963	5·975	17·519	1·494
¼	6·243	·649	4·783	·162	¼	31·521	6·112	17·769	1·528
½	6·527	·695	4·965	·174	½	32·083	6·250	18·021	1·562
¾	6·817	·742	5·149	·185	¾	32·650	6·390	18·274	1·597
8	7·111	·790	5·333	·197	23	33·222	6·531	18·528	1·633
¼	7·410	·840	5·519	·210	¼	33·799	6·674	18·783	1·668
½	7·712	·892	5·706	·223	½	34·379	6·818	19·039	1·705
¾	8·021	·945	5·894	·236	¾	34·965	6·964	19·297	1·741
9	8·333	1·000	6·083	·250	24	35·556	7·111	19·556	1·778
¼	8·650	1·056	6·274	·264	¼	36·150	7·260	19·815	1·815
½	8·973	1·115	6·465	·279	½	36·750	7·411	20·076	1·853
¾	9·299	1·174	6·658	·293	¾	37·354	7·563	20·339	1 891
10	9·630	1·235	6·852	·309	25	37·963	7·716	20·602	1·929
¼	9·965	1·297	7·047	·324	¼	38·576	7·871	20·866	1·968
½	10·306	1·361	7·243	·340	½	39·194	8·028	21·132	2·007
¾	10·650	1·427	7·440	·357	¾	39·817	8·186	21·399	2·046
11	11·000	1·494	7·639	·373	26	40·444	8·347	21·667	2·086
¼	11·354	1·562	7·839	·391	¼	41·076	8·507	21·936	2·127
½	11·712	1·633	8·039	·408	½	41·712	8·670	22·206	2·167
¾	12·076	1·704	8·241	·426	¾	42·354	8·834	22 477	2·209
12	12·444	1·778	8·444	·444	27	43·000	9·000	22·750	2·250
¼	12·817	1·853	8·649	·463	¼	43·650	9·167	23·024	2·292
½	13·194	1·929	8·854	·482	½	44·306	9·336	23·299	2·334
¾	13·576	2·007	9·061	·502	¾	44·965	9·507	23·575	2·377
13	13·963	2·086	9·269	·521	28	45·630	9·679	23·852	2·420
¼	14·354	2·167	9·477	·542	¼	46·299	9·853	24·130	2·463
½	14·750	2·250	9·687	·562	½	46·973	10·028	24·410	2·507
¾	15·150	2·334	9·899	·584	¾	47·650	10·204	24·690	2·551
14	15·556	2·419	10·111	·605	29	48·333	10·383	24·972	2·596
¼	15·965	2·507	10·325	·627	¼	49·021	10·563	25·255	2·641
½	16·379	2·596	10·539	·649	½	49·712	10·744	25·539	2·686
¾	16·799	2·686	10·755	·671	¾	50·410	10·927	25·825	2·732
15	17·222	2·778	10·972	·694	30	51·111	11·111	26·111	2·778

TABLE XI.—Base 16 Feet—*continued.*

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	51·817	11·297	26·399	2·824		102·650	25·279	45·774	6·320
	52·527	11·485	26·687	2·871		103·639	25·559	46·132	6·390
	53·243	11·674	26·977	2·918		104·632	25·840	46·491	6·460
31	53·963	11·864	27·269	2·966	46	105·630	26·123	46·852	6·531
	54·687	12·056	27·561	3·014		106·632	26·408	47·214	6·602
	55·417	12·250	27·854	3·062		107·639	26·694	47·576	6·673
	56·150	12·445	28·149	3·111		108·650	26·982	47·940	6·746
32	56·889	12·642	28·444	3·160	47	109·667	27·272	48·306	6·818
	57·632	12·840	28·741	3·210		110·687	27·563	48·672	6·891
	58·380	13·040	29·039	3·260		111·712	27·855	49·039	6·964
	59·132	13·242	29·339	3·310		112·743	28·149	49·408	7·037
33	59·889	13·444	29·639	3·361	48	113·778	28·444	49·778	7·111
	60·650	13·649	29·940	3·412		114·817	28·742	50·149	7·185
	61·417	13·855	30·243	3·464		115·861	29·040	50·521	7·260
	62·187	14·062	30·547	3·516		116·910	29·340	50·894	7·335
34	62·963	14·272	30·852	3·568	49	117·963	29·642	51·269	7·410
	63·743	14·482	31·158	3·621		119·021	29·945	51·644	7·486
	64·527	14·694	31·465	3·674		120·083	30·250	52·021	7·562
	65·317	14·908	31·774	3·727		121·150	30·556	52·399	7·639
35	66·111	15·123	32·083	3·781	50	122·222	30·864	52·778	7·716
	66·910	15·340	32·394	3·835		123·299	31·174	53·158	7·793
	67·712	15·559	32·706	3·890		124·379	31·485	53·539	7·871
	68·521	15·779	33·019	3·945		125·465	31·797	53·922	7·949
36	69·333	16·000	33·333	4·000	51	126·556	32·111	54·306	8·028
	70·150	16·223	33·649	4·056		127·650	32·427	54·690	8·107
	70·973	16·447	33·965	4·112		128·750	32·744	55·076	8·186
	71·799	16·674	34·283	4·168		129·854	33·063	55·464	8·266
37	72·630	16·901	34·602	4·225	52	130·963	33·383	55·852	8·346
	73·465	17·130	34·922	4·283		132·076	33·704	56·241	8·426
	74·306	17·361	35·243	4·340		133·194	34·028	56·632	8·507
	75·150	17·593	35·565	4·398		134·317	34·353	57·024	8·588
38	76·000	17·827	35·889	4·457	53	135·444	34·679	57·417	8·670
	76·854	18·062	36·214	4·516		136·576	35·007	57·811	8·752
	77·712	18·299	36·539	4·575		137·712	35·336	58·206	8·834
	78·576	18·538	36·866	4·634		138·854	35·667	58·602	8·917
39	79·444	18·778	37·194	4·694	54	140·000	36·000	59·000	9·000
	80·317	19·019	37·524	4·755		141·150	36·334	59·399	9·084
	81·194	19·263	37·854	4·816		142·306	36·670	59·799	9·167
	82·076	19·507	38·186	4·877		143·465	37·007	60·200	9·252
40	82·963	19·753	38·519	4·938	55	144·630	37·346	60·602	9·336
	83·854	20·001	38·852	5·000		145·799	37·686	61·005	9·421
	84·750	20·250	39·187	5·062		146·973	38·028	61·410	9·507
	85·650	20·501	39·524	5·125		148·150	38·371	61·815	9·593
41	86·556	20·753	39·861	5·188	56	149·333	38·716	62·222	9·679
	87·465	21·007	40·200	5·252		150·521	39·063	62·630	9·766
	88·379	21·263	40·539	5·316		151·712	39·411	63·039	9·853
	89·299	21·519	40·880	5·380		152·910	39·760	63·450	9·940
42	90·222	21·778	41·222	5·444	57	154·111	40·111	63·861	10·028
	91·150	22·038	41·565	5·509		155·317	40·464	64·274	10·116
	92·083	22·299	41·910	5·575		156·527	40·818	64·687	10·204
	93·021	22·563	42·255	5·641		157·743	41·174	65·102	10·293
43	93·963	22·827	42·602	5·707	58	158·963	41·531	65·519	10·383
	94·910	23·093	42·950	5·773		160·187	41·890	65·936	10·472
	95·861	23·361	43·299	5·840		161·417	42·250	66·354	10·563
	96·817	23·630	43·649	5·908		162·650	42·612	66·774	10·653
44	97·778	23·901	44·000	5·975	59	163·889	42·975	67·194	10·744
	98·743	24·174	44·352	6·043		165·132	43·340	67·616	10·835
	99·712	24·447	44·706	6·112		166·380	43·707	68·039	10·927
	100·687	24·723	45·061	6·181		167·632	44·075	68·464	11·019
45	101·667	25·000	45·417	6·250	60	168·889	44·444	68·889	11·111

TABLE XII.—Base 17 Feet.

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	·161	·001	·162	·002		22·522	4·307	26·829	5·742
	·329	·004	·333	·005		23·106	4·449	27·556	5·933
	·503	·010	·514	·014		23·698	4·594	28·292	6·125
1	·685	·018	·703	·024	16	24·295	4·741	29·035	6·321
	·874	·029	·903	·039		24·902	4·890	29·792	6·520
	1·069	·042	1·111	·056		25·514	5·042	30·556	6·723
	1·272	·057	1·329	·076		26·133	5·196	31·329	6·928
2	1·481	·074	1·556	·099	17	26·759	5·352	32·111	7·136
	1·698	·094	1·792	·125		27·392	5·510	32·903	7·347
	1·920	·116	2·037	·155		28·032	5·671	33·703	7·562
	2·152	·140	2·292	·187		28·679	5·835	34·514	7·779
3	2·389	·167	2·556	·222	18	29·333	6·000	35·333	8·000
	2·633	·196	2·829	·261		29·994	6·168	36·162	8·224
	2·884	·227	3·111	·303		30·662	6·338	37·000	8·451
	3·142	·260	3·403	·347		31·337	6·510	37·847	8·681
4	3·407	·296	3·703	·395	19	32·019	6·685	38·703	8·913
	3·679	·334	4·014	·446		32·707	6·862	39·569	9·150
	3·958	·375	4·333	·500		33·403	7·042	40·444	9·389
	4·244	·418	4·662	·557		34·105	7·223	41·329	9·631
5	4·537	·463	5·000	·617	20	34·815	7·407	42·222	9·877
	4·837	·510	5·347	·681		35·531	7·594	43·125	10·125
	5·143	·560	5·703	·747		36·255	7·782	44·037	10·377
	5·457	·612	6·069	·816		36·985	7·973	44·958	10·631
6	5·778	·667	6·444	·889	21	37·722	8·167	45·889	10·889
	6·105	·723	6·829	·965		38·466	8·362	46·829	11·150
	6·440	·782	7·222	1·044		39·218	8·560	47·778	11·413
	6·781	·844	7·625	1·125		39·976	8·760	48·736	11·681
7	7·129	·907	8·037	1·209	22	40·740	8·963	49·703	11·951
	7·485	·973	8·458	1·298		41·513	9·168	50·681	12·224
	7·846	1·042	8·889	1·389		42·292	9·375	51·667	12·500
	8·216	1·112	9·329	1·483		43·078	9·585	52·662	12·779
8	8·592	1·185	9·778	1·580	23	43·871	9·796	53·667	13·061
	8·976	1·260	10·236	1·681		44·670	10·010	54·681	13·347
	9·366	1·338	10·703	1·784		45·477	10·227	55·703	13·636
	9·763	1·418	11·181	1·890		46·290	10·446	56·736	13·928
9	10·167	1·500	11·667	2·000	24	47·111	10·667	57·778	14·222
	10·578	1·584	12·162	2·113		47·939	10·890	58·829	14·520
	10·996	1·672	12·667	2·229		48·773	11·116	59·889	14·821
	11·420	1·760	13·181	2·347		49·615	11·344	60·958	15·125
10	11·851	1·852	13·703	2·470	25	50·463	11·574	62·037	15·432
	12·291	1·946	14·236	2·594		51·318	11·807	63·125	15·742
	12·736	2·042	14·778	2·723		52·180	12·042	64·222	16·056
	13·189	2·140	15·329	2·853		53·050	12·279	65·329	16·372
11	13·648	2·241	15·889	2·988	26	53·926	12·518	66·444	16·691
	14·115	2·344	16·458	3·125		54·809	12·760	67·569	17·014
	14·587	2·449	17·037	3·265		55·699	13·004	68·703	17·339
	15·068	2·557	17·625	3·409		56·596	13·251	69·847	17·668
12	15·556	2·667	18·222	3·556	27	57·500	13·500	71·000	18·000
	16·050	2·779	18·829	3·705		58·411	13·751	72·162	18·335
	16·551	2·894	19·444	3·859		59·329	14·004	73·333	18·672
	17·059	3·010	20·069	4·014		60·253	14·260	74·514	19·014
13	17·574	3·129	20·703	4·173	28	61·185	14·518	75·703	19·357
	18·096	3·251	21·347	4·335		62·124	14·779	76·903	19·705
	18·625	3·375	22·000	4·500		63·069	15·042	78·111	20·056
	19·161	3·501	22·662	4·668		64·022	15·307	79·329	20·409
14	19·704	3·630	23·333	4·839	29	64·981	15·574	80·556	20·765
	20·253	3·760	24·014	5·014		65·948	15·844	81·792	21·125
	20·810	3·894	24·703	5·191		66·920	16·116	83·035	21·488
	21·374	4·029	25·403	5·372		67·902	16·390	84·292	21·853
15	21·944	4·167	26·111	5·556	30	68·889	16·667	85·556	22·222

TABLE XII.—Base 17 Feet.

Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	69·883	16·946	86·829	22·594
	70·884	17·227	88·111	22·970
	71·892	17·510	89·403	23·347
31	72·907	17·796	90·703	23·728
	73·929	18·084	92·014	24·113
	74·958	18·375	93·333	24·500
	75·994	18·668	94·662	24·890
32	77·037	18·963	96·000	25·284
	78·087	19·260	97·347	25·681
	79·143	19·560	98·703	26·080
	80·207	19·862	100·069	26·483
33	81·278	20·167	101·444	26·889
	82·355	20·473	102·829	27·298
	83·440	20·782	104·222	27·709
	84·531	21·094	105·625	28·125
34	85·629	21·407	107·037	28·543
	86·735	21·723	108·458	28·965
	87·846	22·042	109·889	29·389
	88·966	22·362	111·329	29·816
35	90·092	22·685	112·778	30·247
	91·226	23·010	114·236	30·681
	92·366	23·338	115·703	31·117
	93·513	23·668	117·181	31·557
36	94·667	24·000	118·667	32·000
	95·828	24·334	120·162	32·446
	96·996	24·671	121·667	32·895
	98·170	25·010	123·181	33·347
37	99·351	25·352	124·703	33·802
	100·540	25·696	126·236	34·261
	101·736	26·042	127·778	34·722
	102·939	26·390	129·329	35·187
38	104·148	26·741	130·889	35·654
	105·365	27·094	132·458	36·125
	106·587	27·449	134·037	36·599
	107·818	27·807	135·625	37·076
39	109·056	28·167	137·222	37·556
	110·300	28·529	138·829	38·039
	111·551	28·894	140·444	38·525
	112·809	29·260	142·069	39·014
40	114·074	29·630	143·703	39·506
	115·346	30·001	145·347	40·002
	116·625	30·375	147·000	40·500
	117·911	30·751	148·662	41·002
41	119·204	31·129	150·333	41·506
	120·503	31·510	152·014	42·014
	121·810	31·894	153·703	42·525
	123·124	32·279	155·403	43·039
42	124·444	32·667	157·111	43·556
	125·772	33·057	158·829	44·076
	127·106	33·449	160·556	44·599
	128·448	33·844	162·292	45·125
43	129·795	34·241	164·037	45·654
	131·152	34·640	165·792	46·187
	132·514	35·042	167·556	46·722
	133·883	35·446	169·329	47·261
44	135·259	35·852	171·111	47·802
	136·642	36·260	172·903	48·347
	138·032	36·671	174·703	48·895
	139·429	37·085	176·514	49·446
45	140·833	37·500	178·333	50·000

Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	142·244	37·918	180·162	50·557
	143·662	38·338	182·000	51·117
	145·087	38·760	183·847	51·681
46	146·519	39·185	185·703	52·247
	147·957	39·612	187·569	52·816
	149·403	40·042	189·444	53·389
	150·855	40·473	191·329	53·965
47	152·315	40·907	193·222	54·543
	153·781	41·344	195·125	55·125
	155·255	41·782	197·037	55·709
	156·735	42·223	198·958	56·298
48	158·222	42·667	200·889	56·889
	159·716	43·112	202·829	57·483
	161·218	43·560	204·778	58·080
	162·726	44·010	206·736	58·681
49	164·240	44·463	208·703	59·284
	165·763	44·918	210·681	59·890
	167·292	45·375	212·667	60·500
	168·827	45·834	214·662	61·113
50	170·371	46·296	216·667	61·728
	171·920	46·760	218·681	62·347
	173·477	47·227	220·703	62·970
	175·041	47·696	222·736	63·594
51	176·611	48·167	224·778	64·222
	178·189	48·640	226·829	64·853
	179·773	49·116	228·889	65·488
	181·365	49·594	230·958	66·125
52	182·963	50·074	233·037	66·765
	184·568	50·557	235·125	67·409
	186·180	51·042	237·222	68·056
	187·800	51·529	239·329	68·705
53	189·426	52·018	241·444	69·357
	191·059	52·510	243·569	70·014
	192·699	53·004	245·703	70·672
	194·346	53·501	247·847	71·335
54	196·000	54·000	250·000	72·000
	197·661	54·501	252·162	72·668
	199·329	55·004	254·333	73·339
	201·003	55·510	256·514	74·014
55	202·685	56·018	258·703	74·691
	204·374	56·529	260·903	75·372
	206·069	57·042	263·111	76·056
	207·772	57·557	265·329	76·742
56	209·481	58·074	267·556	77·432
	211·198	58·594	269·792	78·125
	212·920	59·116	272·037	78·821
	214·652	59·640	274·292	79·520
57	216·389	60·167	276·556	80·222
	218·133	60·696	278·829	80·928
	219·884	61·227	281·111	81·636
	221·642	61·760	283·403	82·347
58	223·407	62·296	285·703	83·061
	225·179	62·834	288·014	83·779
	226·958	63·375	290·333	84·500
	228·744	63·918	292·662	85·224
59	230·537	64·463	295·000	85·951
	232·337	65·010	297·347	86·681
	234·143	65·560	299·703	87·413
	235·957	66·112	302·069	88·150
60	237·778	66·667	304·444	88·889

TABLE XII.—Base 17 Feet—*continued.*

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	·160	·001	·158	·000	¼	18·215	2·871	11·755	·718
½	·324	·003	·317	·001	½	18·657	2·966	11·984	·741
¾	·493	·007	·477	·002	¾	19·104	3·063	12·214	·766
1	·667	·012	·639	·003	16	19·556	3·161	12·444	·790
¼	·845	·019	·802	·005	¼	20·012	3·260	12·677	·815
½	1·028	·028	·965	·007	½	20·473	3·361	12·910	·840
¾	1·215	·038	1·130	·009	¾	20·937	3·464	13·144	·866
2	1·408	·049	1·296	·012	17	21·407	3·568	13·380	·892
¼	1·604	·062	1·464	·016	¼	21·882	3·674	13·616	·918
½	1·806	·077	1·632	·019	½	22·361	3·781	13·854	·945
¾	2·012	·093	1·802	·023	¾	22·845	3·890	14·093	·972
3	2·222	·111	1·972	·028	18	23·333	4·000	14·333	1·000
¼	2·437	·130	2·144	·033	¼	23·826	4·112	14·575	1·028
½	2·657	·151	2·317	·039	½	24·324	4·225	14·817	1·056
¾	2·882	·174	2·491	·043	¾	24·826	4·340	15·061	1·085
4	3·111	·197	2·667	·049	19	25·333	4·457	15·306	1·114
¼	3·345	·223	2·843	·056	¼	25·845	4·575	15·552	1·144
½	3·583	·250	3·021	·062	½	26·361	4·695	15·798	1·174
¾	3·826	·279	3·200	·070	¾	26·882	4·816	16·047	1·204
5	4·074	·309	3·380	·077	20	27·407	4·939	16·296	1·235
¼	4·326	·340	3·561	·085	¼	27·937	5·063	16·547	1·266
½	4·583	·374	3·743	·093	½	28·473	5·188	16·798	1·297
¾	4·845	·408	3·926	·102	¾	29·012	5·316	17·052	1·329
6	5·111	·444	4·111	·111	21	29·556	5·444	17·306	1·361
¼	5·382	·482	4·297	·121	¼	30·104	5·575	17·561	1·394
½	5·657	·522	4·484	·130	½	30·657	5·707	17·817	1·427
¾	5·937	·562	4·672	·141	¾	31·215	5·840	18·075	1·460
7	6·222	·605	4·861	·151	22	31·778	5·975	18·333	1·494
¼	6·512	·649	5·052	·162	¼	32·345	6·112	18·593	1·528
½	6·806	·695	5·243	·174	½	32·917	6·250	18·854	1·562
¾	7·104	·742	5·436	·185	¾	33·493	6·390	19·116	1·597
8	7·408	·790	5·630	·197	23	34·074	6·531	19·380	1·633
¼	7·715	·840	5·825	·210	¼	34·660	6·674	19·644	1·668
½	8·028	·892	6·021	·223	½	35·250	6·818	19·910	1·705
¾	8·345	·945	6·218	·236	¾	35·845	6·964	20·177	1·741
9	8·667	1·000	6·417	·250	24	36·444	7·111	20·444	1·778
¼	8·993	1·056	6·616	·264	¼	37·049	7·260	20·714	1·815
½	9·324	1·115	6·817	·279	½	37·657	7·411	20·984	1·853
¾	9·660	1·174	7·019	·293	¾	38·271	7·563	21·255	1·891
10	10·000	1·235	7·222	·309	25	38·889	7·716	21·528	1·929
¼	10·345	1·297	7·427	·324	¼	39·512	7·871	21·802	1·968
½	10·695	1·361	7·632	·340	½	40·139	8·028	22·076	2·007
¾	11·049	1·427	7·839	·357	¾	40·771	8·186	22·352	2·046
11	11·408	1·494	8·046	·373	26	41·408	8·347	22·630	2·086
¼	11·771	1·562	8·255	·391	¼	42·049	8·507	22·908	2·127
½	12·139	1·633	8·465	·408	½	42·695	8·670	23·187	2·167
¾	12·512	1·704	8·677	·426	¾	43·345	8·834	23·468	2·209
12	12·889	1·778	8·889	·444	27	44·000	9·000	23·750	2·250
¼	13·271	1·853	9·102	·463	¼	44·660	9·167	24·033	2·292
½	13·657	1·929	9·317	·482	½	45·324	9·336	24·317	2·334
¾	14·049	2·007	9·533	·502	¾	45·993	9·507	24·602	2·377
13	14·444	2·086	9·750	·521	28	46·667	9·679	24·889	2·420
¼	14·845	2·167	9·968	·542	¼	47·345	9·853	25·177	2·463
½	15·250	2·250	10·187	·562	½	48·028	10·028	25·465	2·507
¾	15·660	2·334	10·408	·584	¾	48·715	10·204	25·755	2·551
14	16·074	2·419	10·630	·605	29	49·408	10·383	26·046	2·596
¼	16·493	2·507	10·852	·627	¼	50·104	10·563	26·339	2·641
½	16·917	2·596	11·076	·649	½	50·806	10·744	26·632	2·686
¾	17·345	2·686	11·302	·671	¾	51·512	10·927	26·927	2·732
15	17·778	2·778	11·528	·694	30	52·222	11·111	27·222	2·778

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	52·937	11·297	27·519	2·824		104·326	25·279	47·450	6·320
	53·657	11·485	27·817	2·871		105·324	25·559	47·817	6·390
	54·382	11·674	28·116	2·918		106·326	25·840	48·186	6·460
31	55·111	11·864	28·417	2·966	46	107·333	26·123	48·556	6·531
	55·845	12·056	28·718	3·014		108·345	26·408	48·926	6·602
	56·583	12·250	29·021	3·062		109·361	26·694	49·298	6·673
	57·326	12·445	29·325	3·111		110·382	26·982	49·672	6·746
32	58·074	12·642	29·630	3·160	47	111·407	27 272	50·046	6·818
	58·826	12·840	29·936	3·210		112·437	27·563	50·422	6·891
	59·583	13·040	30·243	3·260		113·473	27·855	50·798	6·964
	60·345	13·242	30·552	3·310		114·512	28·149	51·176	7·037
33	61·111	13·444	30·861	3·361	48	115·556	28·444	51·556	7·111
	61·882	13·649	31·172	3·412		116·604	28·742	51·936	7·185
	62·657	13·855	31·484	3·464		117·657	29·040	52·317	7·260
	63·437	14·062	31·797	3·516		118·715	29·340	52·700	7·335
34	64·222	14·272	32·111	3·568	49	119·778	29·642	53·083	7·410
	65·012	14·482	32·426	3·621		120·845	29·945	53·468	7·486
	65·806	14·694	32·743	3·674		121·917	30·250	53·854	7·562
	66·604	14·908	33·061	3·727		122·993	30·556	54·241	7·639
35	67·408	15·123	33·380	3·781	50	124·074	30·864	54·630	7·716
	68·215	15·340	33·700	3·835		125·160	31·174	55·019	7·793
	69·028	15·559	34·021	3·890		126·250	31·485	55·410	7·871
	69·845	15·779	34·343	3·945		127·345	31·797	55·801	7·949
36	70·667	16·000	34·667	4·000	51	128·444	32·111	56·194	8·028
	71·493	16·223	34·991	4·056		129·549	32·427	56·589	8·107
	72·324	16·447	35·317	4·112		130·657	32·744	56·984	8·186
	73·160	16·674	35·644	4·168		131·771	33·063	57·380	8·266
37	74·000	16·901	35·972	4·225	52	132·889	33·383	57·778	8·346
	74·845	17·130	36·302	4·283		134·012	33·704	58·176	8·426
	75·695	17·361	36·632	4·340		135·139	34·028	58·576	8·507
	76·549	17·593	36·964	4·398		136·271	34·353	58·977	8·588
38	77·408	17·827	37·296	4·457	53	137·408	34·679	59·380	8·670
	78·271	18·062	37·630	4·516		138 549	35·007	59·783	8·752
	79·139	18·299	37·965	4·575		139·695	35·336	60·187	8·834
	80·012	18·538	38·302	4·634		140·845	35·667	60·593	8·917
39	80·889	18·778	38·639	4·694	54	142·000	36·000	61·000	9·000
	81·771	19·019	38·977	4·755		143·160	36·334	61·408	9·084
	82·657	19·263	39·317	4·816		144·324	36 670	61·817	9·167
	83·549	19·507	39·658	4·877		145·493	37·007	62·227	9·252
40	84·444	19·753	40·000	4·938	55	146·667	37 346	62·639	9·336
	85·345	20·001	40·343	5·000		147·845	37·686	63·051	9·421
	86·250	20·250	40·687	5·062		149·028	38·028	63·465	9·507
	87·160	20·501	41·033	5·125		150·215	38·371	63·880	9·593
41	88·074	20·753	41·380	5·188	56	151·408	38·716	64·296	9·679
	88·993	21·007	41·727	5·252		152·604	39·063	64·714	9·766
	89·917	21·263	42·076	5·316		153·806	39·411	65·132	9·853
	90·845	21·519	42·426	5·380		155·012	39·760	65·551	9·940
42	91·778	21·778	42·778	5·444	57	156·222	40·111	65·972	10·028
	92·715	22·038	43·130	5·509		157·437	40·464	66·394	10·116
	93·657	22·299	43·484	5·575		158·657	40·818	66·817	10·204
	94·604	22·563	43·839	5·641		159·882	41·174	67·241	10·293
43	95·556	22·827	44·194	5·707	58	161·111	41·531	67·667	10·383
	96·512	23·093	44·551	5·773		162·345	41·890	68·093	10·472
	97·473	23·361	44·910	5·840		163·583	42·250	68·521	10·563
	98·437	23·630	45·269	5·908		164·826	42·612	68·947	10·653
44	99·407	23·901	45·630	5·975	59	166·074	42·975	69·380	10·744
	100·382	24·174	45·991	6·043		167·326	43·340	69·811	10·835
	101·361	24·447	46·354	6·112		168·583	43·707	70·243	10·927
	102·345	24·723	46·718	6·181		169·845	44·075	70·676	11·019
45	103·333	25·000	47·083	6·250	60	171·111	44·444	71·111	11·111

TABLE XIII.—Base 18 Feet.

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	·170	·001	·171	·002		23·087	4·307	27·394	5·742
	·347	·004	·352	·005		23·681	4·449	28·130	5·933
	·531	·010	·542	·014		24·281	4·594	28·875	6·125
1	·722	·018	·741	·024	16	24·889	4·741	29·630	6·321
	·920	·029	·949	·039		25·503	4·890	30·394	6·520
	1·125	·042	1·167	·056		26·125	5·042	31·167	6·723
	1·337	·057	1·394	·076		26·753	5·196	31·949	6·928
2	1·556	·074	1·630	·099	17	27·389	5·352	32·741	7·136
	1·781	·094	1·875	·125		28·031	5·510	33·542	7·347
	2·014	·116	2·130	·155		28·681	5·671	34·352	7·562
	2·253	·140	2·394	·187		29·337	5·835	35·171	7·779
3	2·500	·167	2·667	·222	18	30·000	6·000	36·000	8·000
	2·753	·196	2·949	·261		30·670	6·168	36·838	8·224
	3·014	·227	3·241	·303		31·347	6·338	37·685	8·451
	3·281	·260	3·542	·347		32·031	6·510	38·542	8·681
4	3·556	·296	3·852	·395	19	32·722	6·685	39·405	8·913
	3·837	·334	4·171	·446		33·420	6·862	40·282	9·150
	4·125	·375	4·500	·500		34·125	7·042	41·167	9·389
	4·420	·418	4·838	·557		34·837	7·223	42·060	9·631
5	4·722	·463	5·185	·617	20	35·556	7·407	42·963	9·877
	5·031	·510	5·542	·681		36·281	7·594	43·875	10·125
	5·347	·560	5·907	·747		37·014	7·782	44·795	10·377
	5·670	·612	6·282	·816		37·753	7·973	45·727	10·631
6	6·000	·667	6·667	·889	21	38·500	8·167	46·667	10·889
	6·337	·723	7·060	·965		39·253	8·362	47·616	11·150
	6·681	·782	7·463	1·044		40·014	8·560	48·574	11·413
	7·031	·844	7·875	1·125		40·781	8·760	49·542	11·681
7	7·389	·907	8·295	1·209	22	41·556	8·963	50·518	11·951
	7·753	·973	8·727	1·298		42·337	9·168	51·505	12·224
	8·125	1·042	9·167	1·389		43·125	9·375	52·500	12·500
	8·503	1·112	9·616	1·483		43·920	9·585	53·505	12·779
8	8·889	1·185	10·074	1·580	23	44·722	9·796	54·518	13·061
	9·281	1·260	10·542	1·681		45·531	10·010	55·542	13·347
	9·681	1·338	11·018	1·784		46·347	10·227	56·574	13·636
	10·087	1·418	11·505	1·890		47·170	10·446	57·616	13·928
9	10·500	1·500	12·000	2·000	24	48·000	10·667	58·667	14·222
	10·920	1·584	12·505	2·113		48·837	10·890	59·727	14·520
	11·347	1·672	13·018	2·229		49·681	11·116	60·795	14·821
	11·781	1·760	13·542	2·347		50·531	11·344	61·875	15·125
10	12·222	1·852	14·074	2·470	25	51·389	11·574	62·963	15·432
	12·670	1·946	14·616	2·594		52·253	11·807	64·060	15·742
	13·125	2·042	15·167	2·723		53·125	12·042	65·167	16·056
	13·587	2·140	15·727	2·853		54·003	12·279	66·282	16·372
11	14·056	2·241	16·295	2·988	26	54·889	12·518	67·405	16·691
	14·531	2·344	16·875	3·125		55·781	12·760	68·542	17·014
	15·014	2·449	17·463	3·265		56·681	13·004	69·685	17·339
	15·503	2·557	18·060	3·409		57·587	13·251	70·838	17·668
12	16·000	2·667	18·667	3·556	27	58·500	13·500	72·000	18·000
	16·503	2·779	19·282	3·705		59·420	13·751	73·171	18·335
	17·014	2·894	19·907	3·859		60·347	14·004	74·352	18·672
	17·531	3·010	20·542	4·014		61·281	14·260	75·542	19·014
13	18·056	3·129	21·185	4·173	28	62·222	14·518	76·741	19·357
	18·587	3·251	21·838	4·335		63·170	14·779	77·949	19·705
	19·125	3·375	22·500	4·500		64·125	15·042	79·167	20·056
	19·670	3·501	23·171	4·668		65·087	15·307	80·394	20·409
14	20·222	3·630	23·852	4·839	29	66·056	15·574	81·630	20·765
	20·781	3·760	24·542	5·014		67·031	15·844	82·875	21·125
	21·347	3·894	25·241	5·191		68·014	16·116	84·130	21·488
	21·920	4·029	25·949	5·372		69·003	16·390	85·394	21·853
15	22·500	4·167	26·667	5·556	30	70·000	16·667	86·667	22·222

TABLE XIII.—Base 18 Feet.

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	71·003	16·946	87·949	22·594		143·920	37·918	181·838	50·557
	72·014	17·227	89·241	22·970		145·347	38·338	183·685	51·117
	73·031	17·510	90·542	23·347		146·781	38·760	185·542	51·681
31	74·056	17·796	91·852	23·728	46	148·222	39·185	187·405	52·247
	75·087	18·084	93·171	24·113		149·670	39·612	189·282	52·816
	76·125	18·375	94·500	24·500		151·125	40·042	191·167	53·389
	77·170	18·668	95·838	24·890		152·587	40·473	193·060	53·965
32	78·222	18·963	97·185	25·284	47	154·056	40·907	194·963	54·543
	79·281	19·260	98·542	25·681		155·531	41·344	196·875	55·125
	80·347	19·560	99·907	26·080		157·014	41·782	198·795	55·709
	81·420	19·862	101·282	26·483		158·503	42·223	200·727	56·298
33	82·500	20·167	102·667	26·889	48	160·000	42·667	202·667	56·889
	83·587	20·473	104·060	27·298		161·503	43·112	204·616	57·483
	84·681	20·782	105·463	27·709		163·014	43·560	206·574	58·080
	85·781	21·094	106·875	28·125		164·531	44·010	208·542	58·681
34	86·889	21·407	108·295	28·543	49	166·056	44·463	210·518	59·284
	88·003	21·723	109·727	28·965		167·587	44·918	212·505	59·890
	89·125	22·042	111·167	29·389		169·125	45·375	214·500	60·500
	90·253	22·362	112·616	29·816		170·670	45·834	216·505	61·113
35	91·389	22·685	114·074	30·247	50	172·222	46·296	218·518	61·728
	92·531	23·010	115·542	30·681		173·781	46·760	220·542	62·347
	93·681	23·338	117·018	31·117		175·347	47·227	222·574	62·970
	94·873	23·668	118·505	31·557		176·920	47·696	224·616	63·594
36	96·000	24·000	120·000	32·000	51	178·500	48·167	226·667	64·222
	97·170	24·334	121·505	32·446		180·087	48·640	228·727	64·853
	98·347	24·671	123·018	32·895		181·681	49·116	230·795	65·488
	99·531	25·010	124·542	33·347		183·281	49·594	232·875	66·125
37	100·722	25·352	126·074	33·802	52	184·889	50·074	234·963	66·765
	101·920	25·696	127·616	34·261		186·503	50·557	237·060	67·409
	103·125	26·042	129·167	34·722		188·125	51·042	239·167	68·056
	104·337	26·390	130·727	35·187		189·753	51·529	241·282	68·705
38	105·556	26·741	132·295	35·654	53	191·389	52·018	243·405	69·357
	106·781	27·094	133·875	36·125		193·031	52·510	245·542	70·014
	108·014	27·449	135·463	36·599		194·681	53·004	247·685	70·672
	109·253	27·807	137·060	37·076		196·337	53·501	249·838	71·335
39	110·500	28·167	138·667	37·556	54	198·000	54·000	252·000	72·000
	111·753	28·529	140·282	38·039		199·670	54·501	254·171	72·668
	113·014	28·894	141·907	38·525		201·347	55·004	256·352	73·339
	114·281	29·260	143·542	39·014		203·031	55·510	258·542	74·014
40	115·556	29·630	145·185	39·506	55	204·722	56·018	260·741	74·691
	116·837	30·001	146·838	40·002		206·420	56·529	262·949	75·372
	118·125	30·375	148·500	40·500		208·125	57·042	265·167	76·056
	119·420	30·751	150·171	41·002		209·837	57·557	267·394	76·742
41	120·722	31·129	151·852	41·506	56	211·556	58·074	269·630	77·432
	122·031	31·510	153·542	42·014		213·281	58·594	271·875	78·125
	123·347	31·894	155·241	42·525		215·014	59·116	274·130	78·821
	124·670	32·279	156·949	43·039		216·753	59·640	276·394	79·520
42	126·000	32·667	158·667	43·556	57	218·500	60·167	278·667	80·222
	127·337	33·057	160·394	44·076		220·253	60·696	280·949	80·928
	128·681	33·449	162·130	44·599		222·014	61·227	283·241	81·636
	130·031	33·844	163·875	45·125		223·781	61·760	285·542	82·347
43	131·389	34·241	165·630	45·654	58	225·556	62·296	287·852	83·061
	132·753	34·640	167·394	46·187		227·337	62·834	290·171	83·779
	134·125	35·042	169·167	46·722		229·125	63·375	292·500	84·500
	135·503	35·446	170·949	47·261		230·920	63·918	294·838	85·224
44	136·889	35·852	172·741	47·802	59	232·722	64·463	297·185	85·951
	138·281	36·260	174·542	48·347		234·531	65·010	299·542	86·681
	139·681	36·671	176·352	48·895		236·347	65·560	301·907	87·413
	141·087	37·085	178·171	49·446		238·170	66·112	304·282	88·150
45	142·500	37·500	180·000	50·000	60	240·000	66·667	306·667	88·889

TABLE XIII.—Base 18 Feet—*continued.*

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	·169	·001	·167	·000	¼	18·780	2·871	12·320	·718
½	·343	·003	·336	·001	½	19·232	2·966	12·558	·741
¾	·521	·007	·505	·002	¾	19·687	3·063	12·797	·766
1	·704	·012	·676	·003	16	20·148	3·161	13·037	·790
¼	·891	·019	·848	·005	¼	20·613	3·260	13·278	·815
½	1·084	·028	1·021	·007	½	21·084	3·361	13·521	·840
¾	1·280	·038	1·195	·009	¾	21·558	3·464	13·764	·866
2	1·481	·049	1·370	·012	17	22·037	3·568	14·009	·892
¼	1·687	·062	1·547	·016	¼	22·521	3·674	14·255	·918
½	1·898	·077	1·724	·019	½	23·009	3·781	14·502	·945
¾	2·113	·093	1·903	·023	¾	23·502	3·890	14·751	·972
3	2·333	·111	2·083	·028	18	24·000	4·000	15·000	1·000
¼	2·558	·130	2·264	·033	¼	24·502	4·112	15·251	1·028
½	2·787	·151	2·447	·039	½	25·009	4·225	15·502	1·056
¾	3·021	·174	2·630	·043	¾	25·521	4·340	15·755	1·085
4	3·260	·197	2·815	·049	19	26·037	4·457	16·009	1·114
¼	3·502	·223	3·001	·056	¼	26·558	4·575	16·264	1·144
½	3·750	·250	3·188	·062	½	27·084	4·695	16·521	1·174
¾	4·002	·279	3·376	·070	¾	27·613	4·816	16·778	1·204
5	4·260	·309	3·565	·077	20	28·148	4·939	17·037	1·235
¼	4·521	·340	3·755	·085	¼	28·687	5·063	17·297	1·266
½	4·787	·374	3·947	·093	½	29·232	5·188	17·558	1·297
¾	5·058	·408	4·139	·102	¾	29·780	5·316	17·820	1·329
6	5·333	·444	4·333	·111	21	30·333	5·444	18·083	1·361
¼	5·613	·482	4·528	·121	¼	30·891	5·575	18·348	1·394
½	5·898	·522	4·724	·130	½	31·454	5·707	18·613	1·427
¾	6·187	·562	4·922	·141	¾	32·021	5·840	18·880	1·460
7	6·481	·605	5·120	·151	22	32·593	5·975	19·148	1·494
¼	6·780	·649	5·320	·162	¼	33·169	6·112	19·417	1·528
½	7·084	·695	5·521	·174	½	33·750	6·250	19·687	1·562
¾	7·391	·742	5·723	·185	¾	34·336	6·390	19·959	1·597
8	7·704	·790	5·926	·197	23	34·926	6·531	20·232	1·633
¼	8·021	·840	6·130	·210	¼	35·521	6·674	20·505	1·668
½	8·343	·892	6·336	·223	½	36·120	6·818	20·780	1·705
¾	8·669	·945	6·542	·236	¾	36·725	6·964	21·056	1·741
9	9·000	1·000	6·750	·250	24	37·333	7·111	21·333	1·778
¼	9·336	1·056	6·959	·264	¼	37·947	7·260	21·612	1·815
½	9·676	1·115	7·169	·279	½	38·565	7·411	21·891	1·853
¾	10·021	1·174	7·380	·293	¾	39·187	7·563	22·172	1·891
10	10·370	1·235	7·593	·309	25	39·815	7·716	22·454	1·929
¼	10·725	1·297	7·806	·324	¼	40·447	7·871	22·737	1·968
½	11·084	1·361	8·021	·340	½	41·084	8·028	23·021	2·007
¾	11·447	1·427	8·237	·357	¾	41·725	8·186	23·306	2·046
11	11·815	1·494	8·454	·373	26	42·370	8·347	23·593	2·086
¼	12·187	1·562	8·672	·391	¼	43·021	8·507	23·880	2·127
½	12·565	1·633	8·891	·408	½	43·676	8·670	24·169	2·167
¾	12·947	1·704	9·112	·426	¾	44·336	8·834	24·459	2·209
12	13·333	1·778	9·333	·444	27	45·000	9·000	24·750	2·250
¼	13·725	1·853	9·556	·463	¼	45·669	9·167	25·042	2·292
½	14·120	1·929	9·780	·482	½	46·343	9·336	25·336	2·334
¾	14·521	2·007	10·005	·502	¾	47·021	9·507	25·630	2·377
13	14·926	2·086	10·232	·521	28	47·704	9·679	25·926	2·420
¼	15·336	2·167	10·459	·542	¼	48·391	9·853	26·223	2·463
½	15·750	2·250	10·687	·562	½	49·084	10·028	26·521	2·507
¾	16·169	2·334	10·917	·584	¾	49·780	10·204	26·820	2·551
14	16·593	2·419	11·148	·605	29	50·481	10·383	27·120	2·596
¼	17·021	2·507	11·380	·627	¼	51·187	10·563	27·422	2·641
½	17·454	2·596	11·613	·649	½	51·898	10·744	27·724	2·686
¾	17·891	2·686	11·848	·671	¾	52·613	10·927	28·028	2·732
15	18·333	2·778	12·083	·694	30	53·333	11·111	28·333	2·778

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	54·058	11·297	28·639	2·824		106·002	25·279	49·125	6·320
	54·787	11·485	28·947	2·871		107·009	25·559	49·502	6·390
	55·521	11·674	29·255	2·918		108·021	25·840	49·880	6·460
31	56·260	11·864	29·565	2·966	46	109·037	26·123	50·259	6·531
	57·002	12·056	29·876	3·014		110·058	26·408	50·639	6·602
	57·750	12·250	30·188	3·062		111·084	26·694	51·021	6·673
	58·502	12·445	30·501	3·111		112·113	26·982	51·403	6·746
32	59·260	12·642	30·815	3·160	47	113·148	27·272	51·787	6·818
	60·021	12·840	31·130	3·210		114·187	27·563	52·172	6·891
	60·787	13·040	31·447	3·260		115·232	27·855	52·558	6·964
	61·558	13·242	31·764	3·310		116·280	28·149	52·945	7·037
33	62·333	13·444	32·083	3·361	48	117·333	28·444	53·333	7·111
	63·113	13·649	32·403	3·412		118·391	28·742	53·723	7·185
	63·898	13·855	32·724	3·464		119·454	29·040	54·113	7·260
	64·687	14·062	33·047	3·516		120·521	29·340	54·505	7·335
34	65·481	14·272	33·370	3·568	49	121·593	29·642	54·898	7·410
	66·280	14·482	33·695	3·621		122·669	29·945	55·292	7·486
	67·084	14·694	34·021	3·674		123·750	30·250	55·687	7·562
	67·891	14·908	34·348	3·727		124·836	30·556	56·084	7·639
35	68·704	15·123	34·676	3·781	50	125·926	30·864	56·482	7·716
	69·521	15·340	35·005	3·835		127·021	31·174	56·880	7·793
	70·343	15·559	35·336	3·890		128·120	31·485	57·280	7·871
	71·169	15·779	35·667	3·945		129·225	31·797	57·681	7·949
36	72·000	16·000	36·000	4·000	51	130·333	32·111	58·083	8·028
	72·836	16·223	36·334	4·056		131·447	32·427	58·487	8·107
	73·676	16·447	36·669	4·112		132·565	32·744	58·891	8·186
	74·521	16·674	37·005	4·168		133·687	33·063	59·297	8·266
37	75·370	16·901	37·343	4·225	52	134·815	33·383	59·704	8·346
	76·225	17·130	37·681	4·283		135·947	33·704	60·112	8·426
	77·084	17·361	38·021	4·340		137·084	34·028	60·521	8·507
	77·947	17·593	38·362	4·398		138·225	34·353	60·931	8·588
38	78·815	17·827	38·704	4·457	53	139·370	34·679	61·343	8·670
	79·687	18·062	39·047	4·516		140·521	35·007	61·755	8·752
	80·565	18·299	39·391	4·575		141·676	35·336	62·169	8·834
	81·447	18·538	39·737	4·634		142·836	35·667	62·584	8·917
39	82·333	18·778	40·083	4·694	54	144·000	36·000	63·000	9·000
	83·225	19·019	40·431	4·755		145·169	36·334	63·417	9·084
	84·120	19·263	40·780	4·816		146·343	36·670	63·836	9·167
	85·021	19·507	41·130	4·877		147·521	37·007	64·255	9·252
40	85·926	19·753	41·482	4·938	55	148·704	37·346	64·676	9·336
	86·836	20·001	41·834	5·000		149·891	37·686	65·098	9·421
	87·750	20·250	42·187	5·062		151·084	38·028	65·521	9·507
	88·669	20·501	42·542	5·125		152·280	38·371	65·945	9·593
41	89·593	20·753	42·898	5·188	56	153·481	38·716	66·370	9·679
	90·521	21·007	43·255	5·252		154·687	39·063	66·797	9·766
	91·454	21·263	43·613	5·316		155·898	39·411	67·224	9·853
	92·391	21·519	43·973	5·380		157·113	39·760	67·653	9·940
42	93·333	21·778	44·333	5·444	57	158·333	40·111	68·083	10·028
	94·280	22·038	44·695	5·509		159·558	40·464	68·514	10·116
	95·232	22·299	45·058	5·575		160·787	40·818	68·947	10·204
	96·187	22·563	45·422	5·641		162·021	41·174	69·380	10·293
43	97·148	22·827	45·787	5·707	58	163·260	41·531	69·815	10·383
	98·113	23·093	46·153	5·773		164·502	41·890	70·250	10·472
	99·084	23·361	46·521	5·840		165·750	42·250	70·688	10·563
	100·058	23·630	46·889	5·908		167·002	42·612	71·125	10·653
44	101·037	23·901	47·259	5·975	59	168·260	42·975	71·565	10·744
	102·021	24·174	47·630	6·043		169·521	43·340	72·005	10·835
	103·009	24·447	48·002	6·112		170·787	43·707	72·447	10·927
	104·002	24·723	48·375	6·181		172·058	44·075	72·889	11·019
45	105·000	25·000	48·750	6·250	60	173·333	44·444	73·333	11·111

TABLE XIV.—Base 19 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·365	·004	·370	·005	·361	·003	·354	·001	½
1	·759	·018	·778	·024	·741	·012	·713	·003	1
1½	1·181	·042	1·222	·056	1·139	·028	1·076	·007	1½
2	1·630	·074	1·704	·099	1·556	·049	1·444	·012	2
2½	2·107	·116	2·222	·155	1·991	·077	1·817	·019	2½
3	2·611	·167	2·778	·222	2·444	·111	2·194	·028	3
3½	3·144	·227	3·370	·303	2·917	·151	2·576	·039	3½
4	3·703	·296	4·000	·395	3·407	·197	2·963	·049	4
4½	4·292	·375	4·667	·500	3·917	·250	3·354	·062	4½
5	4·907	·463	5·370	·617	4·444	·309	3·750	·077	5
5½	5·551	·560	6·111	·747	4·991	·374	4·150	·093	5½
6	6·222	·667	6·889	·889	5·556	·444	4·556	·111	6
6½	6·921	·782	7·704	1·044	6·139	·522	4·965	·130	6½
7	7·648	·907	8·556	1·209	6·741	·605	5·380	·151	7
7½	8·402	1·042	9·444	1·389	7·361	·695	5·799	·174	7½
8	9·185	1·185	10·370	1·580	8·000	·790	6·222	·197	8
8½	9·995	1·338	11·333	1·784	8·657	·892	6·650	·223	8½
9	10·833	1·500	12·333	2·000	9·333	1·000	7·083	·250	9
9½	11·699	1·672	13·370	2·229	10·028	1·115	7·521	·279	9½
10	12·593	1·852	14·444	2·470	10·741	1·235	7·963	·309	10
10½	13·514	2·042	15·556	2·723	11·473	1·361	8·410	·340	10½
11	14·462	2·241	16·704	2·988	12·222	1·494	8·861	·373	11
11½	15·440	2·449	17·889	3·265	12·991	1·633	9·317	·408	11½
12	16·444	2·667	19·111	3·556	13·778	1·778	9·778	·444	12
12½	17·477	2·894	20·370	3·859	14·583	1·929	10·243	·482	12½
13	18·537	3·129	21·667	4·173	15·407	2·086	10·713	·521	13
13½	19·625	3·375	23·000	4·500	16·250	2·250	11·187	·562	13½
14	20·739	3·630	24·370	4·839	17·111	2·419	11·667	·605	14
14½	21·885	3·894	25·778	5·191	17·991	2·596	12·150	·649	14½
15	23·056	4·167	27·222	5·556	18·889	2·778	12·639	·694	15
15½	24·255	4·449	28·704	5·933	19·806	2·966	13·132	·741	15½
16	25·481	4·741	30·222	6·321	20·741	3·161	13·630	·790	16
16½	26·735	5·042	31·778	6·723	21·694	3·361	14·132	·840	16½
17	28·019	5·352	33·370	7·136	22·667	3·568	14·639	·892	17
17½	29·328	5·671	35·000	7·562	23·657	3·781	15·150	·945	17½
18	30·667	6·000	36·667	8·000	24·667	4·000	15·667	1·000	18
18½	32·032	6·338	38·370	8·451	25·694	4·225	16·187	1·056	18½
19	33·426	6·685	40·111	8·913	26·741	4·457	16·713	1·114	19
19½	34·847	7·042	41·889	9·389	27·806	4·695	17·243	1·174	19½
20	36·296	7·407	43·704	9·877	28·889	4·939	17·778	1·235	20
20½	37·773	7·782	45·556	10·377	29·991	5·188	18·317	1·297	20½
21	39·278	8·167	47·444	10·889	31·111	5·444	18·861	1·361	21
21½	40·810	8·560	49·370	11·413	32·250	5·707	19·410	1·427	21½
22	42·370	8·963	51·333	11·951	33·407	5·975	19·963	1·494	22
22½	43·958	9·375	53·333	12·500	34·583	6·250	20·521	1·562	22½
23	45·574	9·796	55·370	13·061	35·778	6·531	21·083	1·633	23
23½	47·218	10·227	57·444	13·636	36·991	6·818	21·650	1·705	23½
24	48·889	10·667	59·556	14·222	38·222	7·111	22·222	1·778	24
24½	50·589	11·116	61·704	14·821	39·473	7·411	22·799	1·853	24½
25	52·315	11·574	63·889	15·432	40·741	7·716	23·380	1·929	25
25½	54·069	12·042	66·111	16·056	42·028	8·028	23·965	2·007	25½
26	55·851	12·518	68·370	16·691	43·333	8·347	24·556	2·086	26
26½	57·662	13·004	70·667	17·339	44·657	8·670	25·150	2·167	26½
27	59·500	13·500	73·000	18·000	46·000	9·000	25·750	2·250	27
27½	61·365	14·004	75·370	18·672	47·361	9·336	26·354	2·334	27½
28	63·259	14·518	77·778	19·357	48·741	9·679	26·963	2·420	28
28½	65·180	15·042	80·222	20·056	50·139	10·028	27·576	2·507	28½
29	67·130	15·574	82·704	20·765	51·556	10·383	28·194	2·596	29
29½	69·107	16·116	85·222	21·488	52·991	10·744	28·817	2·686	29½
30	71·111	16·667	87·778	22·222	54·444	11·111	29·444	2·778	30

TABLE XIV.—Base 19 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
30½	73·144	17·227	90·370	22·970	55·917	11·485	30·076	2·871	30½
31	75·203	17·796	93·000	23·728	57·407	11 864	30·713	2·966	31
31½	77·292	18·375	95·667	24·500	58·917	12·250	31·354	3·062	31½
32	79·407	18·963	98·370	25·284	60·444	12·642	32·000	3·160	32
32½	81·551	19·560	101·111	26·080	61·991	13·040	32·650	3·260	32½
33	83·722	20·167	103·889	26·889	63·556	13·444	33·306	3·361	33
33½	85·921	20·782	106·704	27·709	65·139	13·855	33·965	3·464	33½
34	88·148	21·407	109·556	28·543	66·741	14·272	34·630	3·568	34
34½	90·402	22·042	112·444	29·389	68·361	14·694	35·299	3·674	34½
35	92·685	22·685	115·370	30·247	70·000	15·123	35·972	3·781	35
35½	94·995	23·338	118·333	31·117	71·657	15·559	36·650	3·890	35½
36	97·333	24·000	121·333	32·000	73·333	16·000	37·333	4·000	36
36½	99·699	24·671	124·370	32·895	75·028	16·447	38·021	4·112	36½
37	102·093	25·352	127·444	33·802	76·741	16·901	38·713	4·225	37
37½	104·514	26·042	130·556	34·722	78·473	17·361	39·410	4·340	37½
38	106·963	26·741	133·704	35·654	80·222	17·827	40·111	4·457	38
38½	109·440	27·449	136·889	36·599	81·991	18·299	40·817	4·575	38½
39	111·944	28·167	140·111	37·556	83·778	18·778	41·528	4·694	39
39½	114·477	28·894	143·370	38·525	85·583	19·263	42·243	4·816	39½
40	117·036	29·630	146·667	39·506	87·407	19·753	42·963	4·933	40
40½	119·625	30·375	150·000	40·500	89·250	20·250	43·687	5·062	40½
41	122·240	31·129	153·370	41·506	91·111	20·753	44·417	5·188	41
41½	124·884	31·894	156·778	42·525	92·991	21·263	45·150	5·316	41½
42	127·556	32·667	160·222	43·556	94·889	21·778	45·889	5·444	42
42½	130·255	33·449	163·704	44·599	96·806	22·299	46·632	5·575	42½
43	132·981	34·241	167·222	45·654	98·741	22·827	47·380	5·707	43
43½	135·735	35·042	170·778	46·722	100·694	23·361	48·132	5·840	43½
44	138·519	35·852	174·370	47·802	102·667	23·901	48·889	5·975	44
44½	141·328	36·671	178·000	48·895	104·657	24·447	49·650	6·112	44½
45	144·167	37·500	181·667	50·000	106·667	25·000	50·417	6·250	45
45½	147·032	38 338	185·370	51·117	108·694	25·559	51·187	6·390	45½
46	149·926	39·185	189·111	52·247	110·741	26·123	51·963	6·531	46
46½	152·847	40·042	192·889	53·389	112·806	26·694	52·743	6·673	46½
47	155·796	40·907	196·704	54·543	114·889	27·272	53·528	6·818	47
47½	158·773	41·782	200·556	55·709	116·991	27·855	54·317	6·964	47½
48	161·778	42·667	204·444	56·889	119·111	28·444	55·111	7·111	48
48½	164·810	43·560	208·370	58·080	121·250	29·040	55·910	7·260	48½
49	167·870	44·463	212·333	59·284	123·407	29·642	56·713	7·410	49
49½	170·958	45·375	216·333	60·500	125·583	30·250	57·521	7·562	49½
50	174·074	46·296	220·370	61·728	127·778	30·864	58·333	7·716	50
50½	177·218	47·227	224·444	62·970	129·991	31·485	59·150	7·871	50½
51	180·389	48·167	228·556	64·222	132·222	32·111	59·972	8·028	51
51½	183·589	49·116	232·704	65·488	134·473	32·744	60·799	8·186	51½
52	186·815	50·074	236·889	66·765	136·741	33·383	61·630	8·346	52
52½	190·069	51·042	241·111	68·056	139·028	34·028	62·465	8·507	52½
53	193·351	52·018	245·370	69·357	141·333	34·679	63·306	8 670	53
53½	196·662	53·004	249·667	70·672	143·657	35·336	64·150	8·834	53½
54	200·000	54·000	254 000	72·000	146·000	36·000	65·000	9·000	54
54½	203·365	55·004	258·370	73·339	148·361	36·670	65·854	9·167	54½
55	206·759	56·018	262·778	74·691	150·741	37·346	66·713	9·336	55
55½	210·180	57·042	267·222	76·056	153·139	38·028	67·576	9·507	55½
56	213·630	58·074	271·704	77·432	155·556	38·716	68·444	9·679	56
56½	217·107	59·116	276·222	78·821	157·991	39·411	69·317	9·853	56½
57	220·611	60·167	280·778	80·222	160·444	40·111	70·194	10·028	57
57½	224·144	61·227	285·370	81·636	162·917	40·818	71·076	10·204	57½
58	227·703	62·296	290·000	83·061	165·407	41·531	71·963	10·383	58
58½	231·292	63·375	294·667	84·500	167·917	42·250	72·854	10·563	58½
59	234·907	64·463	299·370	85·951	170·444	42·975	73·750	10·744	59
59½	238·551	65·560	304·111	87·413	172·991	43·707	74·650	10·927	59½
60	242·222	66·667	308·889	88·889	175·556	44·444	75·556	11·111	60

TABLE XV.—Base 20 Feet.

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	·189	·001	·190	·002		24·217	4·307	28·523	5·742
	·384	·004	·389	·005		24·829	4·449	29·278	5·933
1	·587	·010	·597	·014	16	25·448	4·594	30·042	6·125
	·796	·018	·815	·024		26·074	4·741	30·815	6·321
	1·013	·029	1·042	·039		26·707	4·890	31·597	6·520
	1·236	·042	1·278	·056		27·347	5·042	32·389	6·723
2	1·466	·057	1·523	·076	17	27·994	5·196	33·190	6·928
	1·704	·074	1·778	·099		28·648	5·352	34·000	7·136
	1·948	·094	2·042	·125		29·309	5·510	34·819	7·347
	2·199	·116	2·315	·155		29·977	5·671	35·648	7·562
	2·457	·140	2·597	·187		30·652	5·835	36·486	7·799
3	2·722	·167	2·889	·222	18	31·333	6·000	37·333	8·000
	2·994	·196	3·190	·261		32·022	6·168	38·190	8·224
	3·273	·227	3·500	·303		32·718	6·338	39·056	8·451
	3·559	·260	3·819	·347		33·420	6·510	39·931	8·681
4	3·852	·296	4·148	·395	19	34·130	6·685	40·815	8·913
	4·152	·334	4·486	·446		34·846	6·862	41·708	9·150
	4·458	·375	4·833	·500		35·569	7·042	42·611	9·389
	4·772	·418	5·190	·557		36·300	7·223	43·523	9·631
5	5·093	·463	5·556	·617	20	37·037	7·407	44·444	9·877
	5·420	·510	5·931	·681		37·781	7·594	45·375	10·125
	5·755	·560	6·315	·747		38·532	7·782	46·315	10·377
	6·096	·612	6·708	·816		39·291	7·973	47·264	10·631
6	6·444	·667	7·111	·889	21	40·056	8·167	48·222	10·889
	6·800	·723	7·523	·965		40·828	8·362	49·190	11·150
	7·162	·782	7·944	1·044		41·606	8·560	50·167	11·413
	7·531	·844	8·375	1·125		42·392	8·760	51·153	11·681
7	7·907	·907	8·815	1·209	22	43·185	8·963	52·148	11·951
	8·291	·973	9·264	1·298		43·985	9·168	53·153	12·224
	8·681	1·042	9·722	1·389		44·792	9·375	54·167	12·500
	9·078	1·112	10·190	1·483		45·605	9·585	55·190	12·779
8	9·481	1·185	10·667	1·580	23	46·426	9·796	56·222	13·061
	9·892	1·260	11·153	1·681		47·254	10·010	57·264	13·347
	10·310	1·338	11·648	1·784		48·088	10·227	58·315	13·636
	10·735	1·418	12·153	1·890		48·929	10·446	59·375	13·928
9	11·167	1·500	12·667	2·000	24	49·778	10·667	60·444	14·222
	11·605	1·584	13·190	2·113		50·633	10·890	61·523	14·520
	12·051	1·672	13·722	2·229		51·495	11·116	62·611	14·821
	12·503	1·760	14·264	2·347		52·365	11·344	63·708	15·125
10	12·963	1·852	14·815	2·470	25	53·241	11·574	64·815	15·432
	13·429	1·946	15·375	2·594		54·124	11·807	65·931	15·742
	13·903	2·042	15·944	2·723		55·014	12·042	67·056	16·056
	14·383	2·140	16·523	2·853		55·911	12·279	68·190	16·372
11	14·870	2·241	17·111	2·988	26	56·815	12·518	69·333	16·691
	15·365	2·344	17·708	3·125		57·726	12·760	70·486	17·014
	15·866	2·449	18·315	3·265		58·644	13·004	71·648	17·339
	16·374	2·557	18·931	3·409		59·568	13·251	72·819	17·668
12	16·889	2·667	19·556	3·556	27	60·500	13·500	74·000	18·000
	17·411	2·779	20·190	3·705		61·439	13·751	75·190	18·335
	17·940	2·894	20·833	3·859		62·384	14·004	76·389	18·672
	18·476	3·010	21·486	4·014		63·337	14·260	77·597	19·014
13	19·018	3·129	22·148	4·173	28	64·296	14·518	78·815	19·357
	19·568	3·251	22·819	4·335		65·263	14·779	80·042	19·705
	20·125	3·375	23·500	4·500		66·236	15·042	81·278	20·056
	20·689	3·501	24·190	4·668		67·216	15·307	82·523	20·409
14	21·259	3·630	24·889	4·839	29	68·204	15·574	83·778	20·765
	21·837	3·760	25·597	5·014		69·198	15·844	85·042	21·125
	22·421	3·894	26·315	5·191		70·199	16·116	86·315	21·488
	23·013	4·029	27·042	5·372		71·207	16·390	87·597	21·853
15	23·611	4·167	27·778	5·556	30	72·222	16·667	88·889	22·222

TABLE XV.—Base 20 Feet.

Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	73·244	16·946	90·190	22·594
	74·273	17·227	91·500	22·970
	75·309	17·510	92·819	23·347
31	76·352	17·796	94·148	23·728
	77·402	18·084	95·486	24·113
	78·458	18·375	96·833	24·500
	79·522	18·668	98·190	24·890
32	80·593	18·963	99·556	25·284
	81·670	19·260	100·931	25·681
	82·755	19·560	102·315	26·080
	83·846	19·862	103·708	26·483
33	84·944	20·167	105·111	26·889
	86·050	20·473	106·523	27·298
	87·162	20·782	107·944	27·709
	88·281	21·094	109·375	28·125
34	89·407	21·407	110·815	28·543
	90·541	21·723	112·264	28·965
	91·681	22·042	113·722	29·389
	92·828	22·362	115·190	29·816
35	93·981	22·685	116·667	30·247
	95·142	23·010	118·153	30·681
	96·310	23·338	119·648	31·117
	97·485	23·668	121·153	31·557
36	98·667	24·000	122·667	32·000
	99·855	24·334	124·190	32·446
	101·051	24·671	125·722	32·895
	102·253	25·010	127·264	33·347
37	103·463	25·352	128·815	33·802
	104·679	25·696	130·375	34·261
	105·903	26·042	131·944	34·722
	107·133	26·390	133·523	35·187
38	108·370	26·741	135·111	35·654
	109·615	27·094	136·708	36·125
	110·866	27·449	138·315	36·599
	112·124	27·807	139·931	37·076
39	113·389	28·167	141·556	37·556
	114·661	28·529	143·190	38·039
	115·940	28·894	144·833	38·525
	117·226	29·260	146·486	39·014
40	118·518	29·630	148·148	39·506
	119·818	30·001	149·819	40·002
	121·125	30·375	151·500	40·500
	122·439	30·751	153·190	41·002
41	123·759	31·129	154·889	41·506
	125·087	31·510	156·597	42·014
	126·421	31·894	158·315	42·525
	127·763	32·279	160·042	43·039
42	129·111	32·667	161·778	43·556
	130·466	33·057	163·523	44·076
	131·829	33·449	165·278	44·599
	133·198	33·844	167·042	45·125
43	134·574	34·241	168·815	45·654
	135·957	34·640	170·597	46·187
	137·347	35·042	172·389	46·722
	138·744	35·446	174·190	47·261
44	140·148	35·852	176·000	47·802
	141·559	36·260	177·819	48·347
	142·977	36·671	179·648	48·895
	144·402	37·085	181·486	49·446
45	145·833	37·500	183·333	50·000

Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	147·272	37·918	185·190	50·557
	148·718	38·338	187·056	51·117
	150·170	38·760	188·931	51·681
46	151·630	39·185	190·815	52·247
	153·096	39·612	192·708	52·816
	154·569	40·042	194·611	53·389
	156·050	40·473	196·523	53·965
47	157·537	40·907	198·444	54·543
	159·031	41·344	200·375	55·125
	160·532	41·782	202·315	55·709
	162·040	42·223	204·264	56·298
48	163·556	42·667	206·222	56·889
	165·078	43·112	208·190	57·483
	166·606	43·560	210·167	58·080
	168·142	44·010	212·153	58·681
49	169·685	44·463	214·148	59·284
	171·235	44·918	216·153	59·890
	172·792	45·375	218·167	60·500
	174·355	45·834	220·190	61·113
50	175·926	46·296	222·222	61·728
	177·503	46·760	224·264	62·347
	179·088	47·227	226·315	62·970
	180·679	47·696	228·375	63·594
51	182·278	48·167	230·444	64·222
	183·883	48·640	232·523	64·853
	185·495	49·116	234·611	65·488
	187·115	49·594	236·708	66·125
52	188·741	50·074	238·815	66·765
	190·374	50·557	240·931	67·409
	192·014	51·042	243·056	68·056
	193·661	51·529	245·190	68·705
53	195·315	52·018	247·333	69·357
	196·976	52·510	249·486	70·014
	198·644	53·004	251·648	70·672
	200·318	53·501	253·819	71·335
54	202·000	54·000	256·000	72·000
	203·689	54·501	258·190	72·668
	205·384	55·004	260·389	73·339
	207·087	55·510	262·597	74·014
55	208·796	56·018	264·815	74·691
	210·513	56·529	267·042	75·372
	212·236	57·042	269·278	76·056
	213·966	57·557	271·523	76·742
56	215·704	58·074	273·778	77·432
	217·448	58·594	276·042	78·125
	219·199	59·116	278·315	78·821
	220·957	59·640	280·597	79·520
57	222·722	60·167	282·889	80·222
	224·494	60·696	285·190	80·928
	226·273	61·227	287·500	81·636
	228·059	61·760	289·819	82·347
58	229·852	62·296	292·148	83·061
	231·165	62·834	294·486	83·779
	233·458	63·375	296·833	84·500
	235·272	63·918	299·190	85·224
59	237·093	64·463	301·556	85·951
	238·920	65·010	303·931	86·681
	240·755	65·560	306·315	87·413
	242·596	66·112	308·708	88·150
60	244·444	66·667	311·111	88·889

TABLE XV.—Base 20 Feet—*continued.*

Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	·187	·001	·186	·000
½	·380	·003	·373	·001
¾	·576	·007	·561	·002
1	·778	·012	·750	·003
1¼	·984	·019	·940	·005
1½	1·194	·028	1·132	·007
1¾	1·410	·038	1·325	·009
2	1·630	·049	1·519	·012
2¼	1·854	·062	1·714	·016
2½	2·083	·077	1·910	·019
2¾	2·317	·093	2·107	·023
3	2·556	·111	2·306	·028
3¼	2·799	·130	2·505	·033
3½	3·046	·151	2·706	·039
3¾	3·299	·174	2·908	·043
4	3·556	·197	3·111	·049
4¼	3·817	·223	3·315	·056
4½	4·083	·250	3·521	·062
4¾	4·354	·279	3·727	·070
5	4·630	·309	3·935	·077
5¼	4·910	·340	4·144	·085
5½	5·194	·374	4·354	·093
5¾	5·484	·408	4·565	·102
6	5·778	·444	4·778	·111
6¼	6·076	·482	4·991	·121
6½	6·380	·522	5·206	·130
6¾	6·687	·562	5·422	·141
7	7·000	·605	5·639	·151
7¼	7·317	·649	5·857	·162
7½	7·639	·695	6·076	·174
7¾	7·965	·742	6·297	·185
8	8·296	·790	6·519	·197
8¼	8·632	·840	6·741	·210
8½	8·972	·892	6·965	·223
8¾	9·317	·945	7·190	·236
9	9·667	1·000	7·417	·250
9¼	10·021	1·056	7·644	·264
9½	10·380	1·115	7·873	·279
9¾	10·743	1·174	8·102	·293
10	11·111	1·235	8·333	·309
10¼	11·484	1·297	8·565	·324
10½	11·861	1·361	8·799	·340
10¾	12·243	1·427	9·033	·357
11	12·630	1·494	9·269	·373
11¼	13·021	1·562	9·505	·391
11½	13·417	1·633	9·743	·408
11¾	13·817	1·704	9·982	·426
12	14·222	1·778	10·222	·444
12¼	14·632	1·853	10·463	·463
12½	15·046	1·929	10·706	·482
12¾	15·465	2·007	10·949	·502
13	15·889	2·086	11·194	·521
13¼	16·317	2·167	11·440	·542
13½	16·750	2·250	11·688	·562
13¾	17·187	2·334	11·936	·584
14	17·630	2·419	12·185	·605
14¼	18·076	2·507	12·436	·627
14½	18·528	2·596	12·688	·649
14¾	18·984	2·686	12·940	·671
15	19·444	2·778	13·194	·694
15¼	19·910	2·871	13·449	·718
15½	20·380	2·966	13·706	·741
15¾	20·854	3·063	13·963	·766
16	21·333	3·161	14·222	·790
16¼	21·817	3·260	14·482	·815
16½	22·306	3·361	14·743	·840
16¾	22·799	3·464	15·005	·866
17	23·296	3·568	15·269	·892
17¼	23·799	3·674	15·533	·918
17½	24·306	3·781	15·799	·945
17¾	24·817	3·890	16·065	·972
18	25·333	4·000	16·333	1·000
18¼	25·854	4·112	16·602	1·028
18½	26·380	4·225	16·873	1·056
18¾	26·910	4·340	17·144	1·085
19	27·444	4·457	17·417	1·114
19¼	27·984	4·575	17·690	1·144
19½	28·528	4·695	17·965	1·174
19¾	29·076	4·816	18·241	1·204
20	29·630	4·939	18·519	1·235
20¼	30·187	5·063	18·797	1·266
20½	30·750	5·188	19·076	1·297
20¾	31·317	5·316	19·357	1·329
21	31·889	5·444	19·639	1·361
21¼	32·465	5·575	19·922	1·394
21½	33·046	5·707	20·206	1·427
21¾	33·632	5·840	20·491	1·460
22	34·222	5·975	20·778	1·494
22¼	34·817	6·112	21·065	1·528
22½	35·417	6·250	21·354	1·562
22¾	36·021	6·390	21·644	1·597
23	36·630	6·531	21·935	1·633
23¼	37·243	6·674	22·227	1·668
23½	37·861	6·818	22·521	1·705
23¾	38·484	6·964	22·815	1·741
24	39·111	7·111	23·111	1·778
24¼	39·743	7·260	23·408	1·815
24½	40·380	7·411	23·706	1·853
24¾	41·021	7·563	24·005	1·891
25	41·667	7·716	24·306	1·929
25¼	42·317	7·871	24·607	1·968
25½	42·972	8·028	24·910	2·007
25¾	43·632	8·186	25·214	2·046
26	44·296	8·347	25·519	2·086
26¼	44·965	8·507	25·825	2·127
26½	45·639	8·670	26·132	2·167
26¾	46·317	8·834	26·440	2·209
27	47·000	9·000	26·750	2·250
27¼	47·687	9·167	27·061	2·292
27½	48·380	9·336	27·373	2·334
27¾	49·076	9·507	27·686	2·377
28	49·778	9·679	28·000	2·420
28¼	50·484	9·853	28·315	2·463
28½	51·194	10·028	28·632	2·507
28¾	51·910	10·204	28·950	2·551
29	52·630	10·383	29·268	2·596
29¼	53·354	10·563	29·588	2·641
29½	54·083	10·744	29·910	2·686
29¾	54·817	10·927	30·232	2·732
30	55·556	11·111	30·556	2·778

Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	56·299	11·297	30·880	2·824
	57·046	11·485	31·206	2·871
	57·799	11·674	31·533	2·918
31	58·556	11·864	31·861	2·966
	59·317	12·056	32·190	3·014
	60·083	12·250	32·521	3·062
	60·854	12·445	32·852	3·111
32	61·630	12·642	33·185	3·160
	62·410	12·840	33·519	3·210
	63·194	13·040	33·854	3·260
	63·984	13·242	34·190	3·310
33	64·778	13·444	34·528	3·361
	65·576	13·649	34·866	3·412
	66·380	13·855	35·206	3·464
	67·187	14·062	35·547	3·516
34	68·000	14·272	35·889	3·568
	68·817	14·482	36·232	3·621
	69·639	14·694	36·576	3·674
	70·465	14·908	36·922	3·727
35	71·296	15·123	37·269	3·781
	72·132	15·340	37·616	3·835
	72·972	15·559	37·965	3·890
	73·817	15·779	38·315	3·945
36	74·667	16·000	38·667	4·000
	75·521	16·223	39·019	4·056
	76·380	16·447	39·373	4·112
	77·243	16·674	39·727	4·168
37	78·111	16·901	40·083	4·225
	78·984	17·130	40·440	4·283
	79·861	17·361	40·799	4·340
	80·743	17·593	41·158	4·398
38	81·630	17·827	41·519	4·457
	82·521	18·062	41·880	4·516
	83·417	18·299	42·243	4·575
	84·317	18·538	42·607	4·634
39	85·222	18·778	42·972	4·694
	86·132	19·019	43·338	4·755
	87·046	19·263	43·706	4·816
	87·965	19·507	44·074	4·877
40	88·889	19·753	44·444	4·938
	89·817	20·001	44·815	5·000
	90·750	20·250	45·188	5·062
	91·687	20·501	45·561	5·125
41	92·630	20·753	45·935	5·188
	93·576	21·007	46·311	5·252
	94·528	21·263	46·688	5·316
	95·484	21·519	47·065	5·380
42	96·444	21·778	47·444	5·444
	97·410	22·038	47·824	5·509
	98·380	22·299	48·206	5·575
	99·354	22·563	48·588	5·641
43	100·333	22·827	48·972	5·707
	101·317	23·093	49·357	5·773
	102·306	23·361	49·743	5·840
	103·299	23·630	50·130	5·908
44	104·296	23·901	50·518	5·975
	105·299	24·174	50·908	6·043
	106·306	24·447	51·299	6·112
	107·317	24·723	51·690	6·181
45	108·333	25·000	52·083	6·250
	109·354	25·279	52·477	6·320
	110·380	25·559	52·873	6·390
	111·410	25·840	53·269	6·460
46	112·444	26·123	53·667	6·531
	113·484	26·408	54·065	6·602
	114·528	26·694	54·465	6·673
	115·576	26·982	54·866	6·746
47	116·630	27·272	55·269	6·818
	117·687	27·563	55·672	6·891
	118·750	27·855	56·076	6·964
	119·817	28·149	56·482	7·037
48	120·889	28·444	56·889	7·111
	121·965	28·742	57·297	7·185
	123·046	29·040	57·706	7·260
	124·132	29·340	58·116	7·335
49	125·222	29·642	58·528	7·410
	126·317	29·945	58·940	7·486
	127·417	30·250	59·354	7·562
	128·521	30·556	59·769	7·639
50	129·630	30·864	60·185	7·716
	130·743	31·174	60·602	7·793
	131·861	31·485	61·021	7 871
	132·984	31·797	61·440	7·949
51	134·111	32·111	61·861	8·028
	135·243	32·427	62·283	8·107
	136·380	32·744	62·706	8·186
	137·521	33·063	63·130	8·266
52	138·667	33·383	63·556	8·346
	139·817	33·704	63·982	8·426
	140·972	34 028	64·410	8·507
	142·132	34·353	64·838	8·588
53	143·296	34·679	65·268	8·670
	144·465	35·007	65·699	8·752
	145·639	35·336	66·132	8·834
	146·817	35·667	66·565	8·917
54	148·000	36·000	67·000	9·000
	149·187	36·334	67·436	9·084
	150·380	36 670	67·873	9·167
	151·576	37·007	68·311	9·252
55	152·778	37·346	68·750	9·336
	153·984	37·686	69·190	9·421
	155·194	38·028	69·632	9·507
	156·410	38·371	70·074	9·593
56	157·630	38·716	70·519	9·679
	158·854	39·063	70·963	9·766
	160·083	39·411	71·410	9·853
	161·317	39·760	71·857	9·940
57	162·556	40·111	72·306	10·028
	163·799	40·464	72·755	10·116
	165·046	40·818	73·206	10·204
	166·299	41·174	73·658	10·293
58	167·556	41·531	74·111	10·383
	168·817	41·890	74·565	10·472
	170·083	42·250	75·021	10·563
	171·354	42·612	75·477	10·653
59	172·630	42·975	75·935	10·744
	173·910	43·340	76·394	10·835
	175·194	43·707	76·854	10·927
	176·484	44·075	77·315	11·019
60	177·778	44·444	77·778	11·111

TABLE XII.—Base 17 Feet.

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	·161	·001	·162	·002	¼	22·522	4·307	26·829	5·742
½	·329	·004	·333	·005	½	23·106	4·449	27·556	5·933
¾	·503	·010	·514	·014	¾	23·698	4·594	28·292	6·125
1	·685	·018	·703	·024	16	24·295	4·741	29·035	6·321
¼	·874	·029	·903	·039	¼	24·902	4·890	29·792	6·520
½	1·069	·042	1·111	·056	½	25·514	5·042	30·556	6·723
¾	1·272	·057	1·329	·076	¾	26·133	5·196	31·329	6·928
2	1·481	·074	1·556	·099	17	26·759	5·352	32·111	7·136
¼	1·698	·094	1·792	·125	¼	27·392	5·510	32·903	7·347
½	1·920	·116	2·037	·155	½	28·032	5·671	33·703	7·562
¾	2·152	·140	2·292	·187	¾	28·679	5·835	34·514	7·779
3	2·389	·167	2·556	·222	18	29·333	6·000	35·333	8·000
¼	2·633	·196	2·829	·261	¼	29·994	6·168	36·162	8·224
½	2·884	·227	3·111	·303	½	30·662	6·338	37·000	8·451
¾	3·142	·260	3·403	·347	¾	31·337	6·510	37·847	8·681
4	3·407	·296	3·703	·395	19	32·019	6·685	38·703	8·913
¼	3·679	·334	4·014	·446	¼	32·707	6·862	39·569	9·150
½	3·958	·375	4·333	·500	½	33·403	7·042	40·444	9·389
¾	4·244	·418	4·662	·557	¾	34·105	7·223	41·329	9·631
5	4·537	·463	5·000	·617	20	34·815	7·407	42·222	9·877
¼	4·837	·510	5·347	·681	¼	35·531	7·594	43·125	10·125
½	5·143	·560	5·703	·747	½	36·255	7·782	44·037	10·377
¾	5·457	·612	6·069	·816	¾	36·985	7·973	44·958	10·631
6	5·778	·667	6·444	·889	21	37·722	8·167	45·889	10·889
¼	6·105	·723	6·829	·965	¼	38·466	8·362	46·829	11·150
½	6·440	·782	7·222	1·044	½	39·218	8·560	47·778	11·413
¾	6·781	·844	7·625	1·125	¾	39·976	8·760	48·736	11·681
7	7·129	·907	8·037	1·209	22	40·740	8·963	49·703	11·951
¼	7·485	·973	8·458	1·298	¼	41·513	9·168	50·681	12·224
½	7·846	1·042	8·889	1·389	½	42·292	9·375	51·667	12·500
¾	8·216	1·112	9·329	1·483	¾	43·078	9·585	52·662	12·779
8	8·592	1·185	9·778	1·580	23	43·871	9·796	53·667	13·061
¼	8·976	1·260	10·236	1·681	¼	44·670	10·010	54·681	13·347
½	9·366	1·338	10·703	1·784	½	45·477	10·227	55·703	13·636
¾	9·763	1·418	11·181	1·890	¾	46·290	10·446	56·736	13·928
9	10·167	1·500	11·667	2·000	24	47·111	10·667	57·778	14·222
¼	10·578	1·584	12·162	2·113	¼	47·939	10·890	58·829	14·520
½	10·996	1·672	12·667	2·229	½	48·773	11·116	59·889	14·821
¾	11·420	1·760	13·181	2·347	¾	49·615	11·344	60·958	15·125
10	11·851	1·852	13·703	2·470	25	50·463	11·574	62·037	15·432
¼	12·291	1·946	14·236	2·594	¼	51·318	11·807	63·125	15·742
½	12·736	2·042	14·778	2·723	½	52·180	12·042	64·222	16·056
¾	13·189	2·140	15·329	2·853	¾	53·050	12·279	65·329	16·372
11	13·648	2·241	15·889	2·988	26	53·926	12·518	66·444	16·691
¼	14·115	2·344	16·458	3·125	¼	54·809	12·760	67·569	17·014
½	14·587	2·449	17·037	3·265	½	55·699	13·004	68·703	17·339
¾	15·068	2·557	17·625	3·409	¾	56·596	13·251	69·847	17·668
12	15·556	2·667	18·222	3·556	27	57·500	13·500	71·000	18·000
¼	16·050	2·779	18·829	3·705	¼	58·411	13·751	72·162	18·335
½	16·551	2·894	19·444	3·859	½	59·329	14·004	73·333	18·672
¾	17·059	3·010	20·069	4·014	¾	60·253	14·260	74·514	19·014
13	17·574	3·129	20·703	4·173	28	61·185	14·518	75·703	19·357
¼	18·096	3·251	21·347	4·335	¼	62·124	14·779	76·903	19·705
½	18·625	3·375	22·000	4·500	½	63·069	15·042	78·111	20·056
¾	19·161	3·501	22·662	4·668	¾	64·022	15·307	79·329	20·409
14	19·704	3·630	23·333	4·839	29	64·981	15·574	80·556	20·765
¼	20·253	3·760	24·014	5·014	¼	65·948	15·844	81·792	21·125
½	20·810	3·894	24·703	5·191	½	66·920	16·116	83·035	21·488
¾	21·374	4·029	25·403	5·372	¾	67·902	16·390	84·292	21·853
15	21·944	4·167	26·111	5·556	30	68·889	16·667	85·556	22·222

Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	69·883	16·946	86·829	22·594
	70·884	17·227	88·111	22·970
	71·892	17·510	89·403	23·347
31	72·907	17·796	90·703	23·728
	73·929	18·084	92·014	24·113
	74·958	18·375	93·333	24·500
	75·994	18·668	94·662	24·890
32	77·037	18·963	96·000	25·284
	78·087	19·260	97·347	25·681
	79·143	19·560	98·703	26·080
	80·207	19·862	100·069	26·483
33	81·278	20·167	101·444	26·889
	82·355	20·473	102·829	27·298
	83·440	20·782	104·222	27·709
	84·531	21·094	105·625	28·125
34	85·629	21·407	107·037	28·543
	86·735	21·723	108·458	28·965
	87·846	22·042	109·889	29·389
	88·966	22·362	111·329	29·816
35	90·092	22·685	112·778	30·247
	91·226	23·010	114·236	30·681
	92·366	23·338	115·703	31·117
	93·513	23·668	117·181	31·557
36	94·667	24·000	118·667	32·000
	95·828	24·334	120·162	32·446
	96·996	24·671	121·667	32·895
	98·170	25·010	123·181	33·347
37	99·351	25·352	124·703	33·802
	100·540	25·696	126·236	34·261
	101·736	26·042	127·778	34·722
	102·939	26·390	129·329	35·187
38	104·148	26·741	130·889	35·654
	105·365	27·094	132·458	36·125
	106·587	27·449	134·037	36·599
	107·818	27·807	135·625	37·076
39	109·056	28·167	137·222	37·556
	110·300	28·529	138·829	38·039
	111·551	28·894	140·444	38·525
	112·809	29·260	142·069	39·014
40	114·074	29·630	143·703	39·506
	115·346	30·001	145·347	40·002
	116·625	30·375	147·000	40·500
	117·911	30·751	148·662	41·002
41	119·204	31·129	150·333	41·506
	120·503	31·510	152·014	42·014
	121·810	31·894	153·703	42·525
	123·124	32·279	155·403	43·039
42	124·444	32·667	157·111	43·556
	125·772	33·057	158·829	44·076
	127·106	33·449	160·556	44·599
	128·448	33·844	162·292	45·125
43	129·795	34·241	164·037	45·654
	131·152	34·640	165·792	46·187
	132·514	35·042	167·556	46·722
	133·883	35·446	169·329	47·261
44	135·259	35·852	171·111	47·802
	136·642	36·260	172·903	48·347
	138·032	36·671	174·703	48·895
	139·429	37·085	176·514	49·446
45	140·833	37·500	178·333	50·000

Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	142·244	37·918	180·162	50·557
	143·662	38·338	182·000	51·117
	145·087	38·760	183·847	51·681
46	146·519	39·185	185·703	52·247
	147·957	39·612	187·569	52·816
	149·403	40·042	189·444	53·389
	150·855	40·473	191·329	53·965
47	152·315	40·907	193·222	54·543
	153·781	41·344	195·125	55·125
	155·255	41·782	197·037	55·709
	156·735	42·223	198·958	56·298
48	158·222	42·667	200·889	56·889
	159·716	43·112	202·829	57·483
	161·218	43·560	204·778	58·080
	162·726	44·010	206·736	58·681
49	164·240	44·463	208·703	59·284
	165·763	44·918	210·681	59·890
	167·292	45·375	212·667	60·500
	168·827	45·834	214·662	61·113
50	170·371	46·296	216·667	61·728
	171·920	46·760	218·681	62·347
	173·477	47·227	220·703	62·970
	175·041	47·696	222·736	63·594
51	176·611	48·167	224·778	64·222
	178·189	48·640	226·829	64·853
	179·773	49·116	228·889	65·488
	181·365	49·594	230·958	66·125
52	182·963	50·074	233·037	66·765
	184·568	50·557	235·125	67·409
	186·180	51·042	237·222	68·056
	187·800	51·529	239·329	68·705
53	189·426	52·018	241·444	69·357
	191·059	52·510	243·569	70·014
	192·699	53·004	245·703	70·672
	194·346	53·501	247·847	71·335
54	196·000	54·000	250·000	72·000
	197·661	54·501	252·162	72·668
	199·329	55·004	254·333	73·339
	201·003	55·510	256·514	74·014
55	202·685	56·018	258·703	74·691
	204·374	56·529	260·903	75·372
	206·069	57·042	263·111	76·056
	207·772	57·557	265·329	76·742
56	209·481	58·074	267·556	77·432
	211·198	58·594	269·792	78·125
	212·920	59·116	272·037	78·821
	214·652	59·640	274·292	79·520
57	216·389	60·167	276·556	80·222
	218·133	60·696	278·829	80·928
	219·884	61·227	281·111	81·636
	221·642	61·760	283·403	82·347
58	223·407	62·296	285·703	83·061
	225·179	62·834	288·014	83·779
	226·958	63·375	290·333	84·500
	228·744	63·918	292·662	85·224
59	230·537	64·463	295·000	85·951
	232·337	65·010	297·347	86·681
	234·143	65·560	299·703	87·413
	235·957	66·112	302·069	88·150
60	237·778	66·667	304·444	88·889

TABLE XII.—Base 17 Feet—*continued.*

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	·160	·001	·158	·000	¼	18·215	2·871	11·755	·718
½	·324	·003	·317	·001	½	18·657	2·966	11·984	·741
¾	·493	·007	·477	·002	¾	19·104	3·063	12·214	·766
1	·667	·012	·639	·003	16	19·556	3·161	12·444	·790
¼	·845	·019	·802	·005	¼	20·012	3·260	12·677	·815
½	1·028	·028	·965	·007	½	20·473	3·361	12·910	·840
¾	1·215	·038	1·130	·009	¾	20·937	3·464	13·144	·866
2	1·408	·049	1·296	·012	17	21·407	3·568	13·380	·892
¼	1·604	·062	1·464	·016	¼	21·882	3·674	13·616	·918
½	1·806	·077	1·632	·019	½	22·361	3·781	13·854	·945
¾	2·012	·093	1·802	·023	¾	22·845	3·890	14·093	·972
3	2·222	·111	1·972	·028	18	23·333	4·000	14·333	1·000
¼	2·437	·130	2·144	·033	¼	23·826	4·112	14·575	1·028
½	2·657	·151	2·317	·039	½	24·324	4·225	14·817	1·056
¾	2·882	·174	2·491	·043	¾	24·826	4·340	15·061	1·085
4	3·111	·197	2·667	·049	19	25·333	4·457	15·306	1·114
¼	3·345	·223	2·843	·056	¼	25·845	4·575	15·552	1·144
½	3·583	·250	3·021	·062	½	26·361	4·695	15·798	1·174
¾	3·826	·279	3·200	·070	¾	26·882	4·816	16·047	1·204
5	4·074	·309	3·380	·077	20	27·407	4·939	16·296	1·235
¼	4·326	·340	3·561	·085	¼	27·937	5·063	16·547	1·266
½	4·583	·374	3·743	·093	½	28·473	5·188	16·798	1·297
¾	4·845	·408	3·926	·102	¾	29·012	5·316	17·052	1·329
6	5·111	·444	4·111	·111	21	29·556	5·444	17·306	1·361
¼	5·382	·482	4·297	·121	¼	30·104	5·575	17·561	1·394
½	5·657	·522	4·484	·130	½	30·657	5·707	17·817	1·427
¾	5·937	·562	4·672	·141	¾	31·215	5·840	18·075	1·460
7	6·222	·605	4·861	·151	22	31·778	5·975	18·333	1·494
¼	6·512	·649	5·052	·162	¼	32·345	6·112	18·593	1·528
½	6·806	·695	5·243	·174	½	32·917	6·250	18·854	1·562
¾	7·104	·742	5·436	·185	¾	33·493	6·390	19·116	1·597
8	7·408	·790	5·630	·197	23	34·074	6·531	19·380	1·633
¼	7·715	·840	5·825	·210	¼	34·660	6·674	19·644	1·668
½	8·028	·892	6·021	·223	½	35·250	6·818	19·910	1·705
¾	8·345	·945	6·218	·236	¾	35·845	6·964	20·177	1·741
9	8·667	1·000	6·417	·250	24	36·444	7·111	20·444	1·778
¼	8·993	1·056	6·616	·264	¼	37·049	7·260	20·714	1·815
½	9·324	1·115	6·817	·279	½	37·657	7·411	20·984	1·853
¾	9·660	1·174	7·019	·293	¾	38·271	7·563	21·255	1·891
10	10·000	1·235	7·222	·309	25	38·889	7·716	21·528	1·929
¼	10·345	1·297	7·427	·324	¼	39·512	7·871	21·802	1·968
½	10·695	1·361	7·632	·340	½	40·139	8·028	22·076	2·007
¾	11·049	1·427	7·839	·357	¾	40·771	8·186	22·352	2·046
11	11·408	1·494	8·046	·373	26	41·408	8·347	22·630	2·086
¼	11·771	1·562	8·255	·391	¼	42·049	8·507	22·908	2·127
½	12·139	1·633	8·465	·408	½	42·695	8·670	23·187	2·167
¾	12·512	1·704	8·677	·426	¾	43·345	8·834	23·468	2·209
12	12·889	1·778	8·889	·444	27	44·000	9·000	23·750	2·250
¼	13·271	1·853	9·102	·463	¼	44·660	9·167	24·033	2·292
½	13·657	1·929	9·317	·482	½	45·324	9·336	24·317	2·334
¾	14·049	2·007	9·533	·502	¾	45·993	9·507	24·602	2·377
13	14·444	2·086	9·750	·521	28	46·667	9·679	24·889	2·420
¼	14·845	2·167	9·968	·542	¼	47·345	9·853	25·177	2·463
½	15·250	2·250	10·187	·562	½	48·028	10·028	25·465	2·507
¾	15·660	2·334	10·408	·584	¾	48·715	10·204	25·755	2·551
14	16·074	2·419	10·630	·605	29	49·408	10·383	26·046	2·596
¼	16·493	2·507	10·852	·627	¼	50·104	10·563	26·339	2·641
½	16·917	2·596	11·076	·649	½	50·806	10·744	26·632	2·686
¾	17·345	2·686	11·302	·671	¾	51·512	10·927	26·927	2·732
15	17·778	2·778	11·528	·694	30	52·222	11·111	27·222	2·778

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	52·937	11·297	27·519	2·824		104·326	25·279	47·450	6·320
	53·657	11·485	27·817	2·871		105·324	25·559	47·817	6·390
	54·382	11·674	28·116	2·918		106·326	25·840	48·186	6·460
31	55·111	11·864	28·417	2·966	46	107·333	26·123	48·556	6·531
	55·845	12·056	28·718	3·014		108·345	26·408	48·926	6·602
	56·583	12·250	29·021	3·062		109·361	26·694	49·298	6·673
	57·326	12·445	29·325	3·111		110·382	26·982	49·672	6·746
32	58·074	12·642	29·630	3·160	47	111·407	27 272	50·046	6·818
	58·826	12·840	29·936	3·210		112·437	27·563	50·422	6·891
	59·583	13·040	30·243	3·260		113·473	27·855	50·798	6·964
	60·345	13·242	30·552	3·310		114·512	28·149	51·176	7·037
33	61·111	13·444	30·861	3·361	48	115·556	28·444	51·556	7·111
	61·882	13·649	31·172	3·412		116·604	28·742	51·936	7·185
	62·657	13·855	31·484	3·464		117·657	29·040	52·317	7·260
	63·437	14·062	31·797	3·516		118·715	29·340	52·700	7·335
34	64·222	14·272	32·111	3·568	49	119·778	29·642	53·083	7·410
	65·012	14·482	32·426	3·621		120·845	29·945	53·468	7·486
	65·806	14·694	32·743	3·674		121·917	30·250	53·854	7·562
	66·604	14·908	33·061	3·727		122·993	30·556	54·241	7·639
35	67·408	15·123	33·380	3·781	50	124·074	30·864	54·630	7·716
	68·215	15·340	33·700	3·835		125·160	31·174	55·019	7·793
	69·028	15·559	34·021	3·890		126·250	31·485	55·410	7·871
	69·845	15·779	34·343	3·945		127·345	31·797	55·801	7·949
36	70·667	16·000	34·667	4·000	51	128·444	32·111	56·194	8·028
	71·493	16·223	34·991	4·056		129·549	32·427	56·589	8·107
	72·324	16·447	35·317	4·112		130·657	32·744	56·984	8·186
	73·160	16·674	35·644	4·168		131·771	33·063	57·380	8·266
37	74·000	16·901	35·972	4·225	52	132·889	33·383	57·778	8·346
	74·845	17·130	36·302	4·283		134·012	33·704	58·176	8·426
	75·695	17·361	36·632	4·340		135·139	34·028	58·576	8·507
	76·549	17·593	36·964	4·398		136·271	34·353	58·977	8·588
38	77·408	17·827	37·296	4·457	53	137·408	34·679	59·380	8·670
	78·271	18·062	37·630	4·516		138 549	35·007	59·783	8·752
	79·139	18·299	37·965	4·575		139·695	35·336	60·187	8·834
	80·012	18·538	38·302	4·634		140·845	35·667	60·593	8·917
39	80·889	18·778	38·639	4·694	54	142·000	36·000	61·000	9·000
	81·771	19·019	38·977	4·755		143·160	36·334	61·408	9·084
	82·657	19·263	39·317	4·816		144·324	36 670	61·817	9·167
	83·549	19·507	39·658	4·877		145·493	37·007	62·227	9·252
40	84·444	19·753	40·000	4·938	55	146·667	37 346	62·639	9·336
	85·345	20·001	40·343	5·000		147·845	37·686	63·051	9·421
	86·250	20·250	40·687	5·062		149·028	38·028	63·465	9·507
	87·160	20·501	41·033	5·125		150·215	38·371	63·880	9·593
41	88·074	20·753	41·380	5·188	56	151·408	38·716	64·296	9·679
	88·993	21·007	41·727	5·252		152·604	39·063	64·714	9·766
	89·917	21·263	42·076	5·316		153·806	39·411	65·132	9·853
	90·845	21·519	42·426	5·380		155·012	39·760	65·551	9·940
42	91·778	21·778	42·778	5·444	57	156·222	40·111	65·972	10·028
	92·715	22·038	43·130	5·509		157·437	40·464	66·394	10·116
	93·657	22·299	43·484	5·575		158·657	40·818	66·817	10·204
	94·604	22·563	43·839	5·641		159·882	41·174	67·241	10·293
43	95·556	22·827	44·194	5·707	58	161·111	41·531	67·667	10·383
	96·512	23·093	44·551	5·773		162·345	41·890	68·093	10·472
	97·473	23·361	44·910	5·840		163·583	42·250	68·521	10·563
	98·437	23·630	45·269	5·908		164·826	42·612	68·947	10·653
44	99·407	23·901	45·630	5·975	59	166·074	42·975	69·380	10·744
	100·382	24·174	45·991	6·043		167·326	43·340	69·811	10·835
	101·361	24·447	46·354	6·112		168·583	43·707	70·243	10·927
	102·345	24·723	46·718	6·181		169·845	44·075	70·676	11·019
45	103·333	25·000	47·083	6·250	60	171·111	44·444	71·111	11·111

TABLE XIII.—Base 18 Feet.

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	·170	·001	·171	·002	¼	23·087	4·307	27·394	5·742
½	·347	·004	·352	·005	½	23·681	4·449	28·130	5·933
¾	·531	·010	·542	·014	¾	24·281	4·594	28·875	6·125
1	·722	·018	·741	·024	16	24·889	4·741	29·630	6·321
¼	·920	·029	·949	·039	¼	25·503	4·890	30·394	6·520
½	1·125	·042	1·167	·056	½	26·125	5·042	31·167	6·723
¾	1·337	·057	1·394	·076	¾	26·753	5·196	31·949	6·928
2	1·556	·074	1·630	·099	17	27·389	5·352	32·741	7·136
¼	1·781	·094	1·875	·125	¼	28·031	5·510	33·542	7·347
½	2·014	·116	2·130	·155	½	28·681	5·671	34·352	7·562
¾	2·253	·140	2·394	·187	¾	29·337	5·835	35·171	7·779
3	2·500	·167	2·667	·222	18	30·000	6·000	36·000	8·000
¼	2·753	·196	2·949	·261	¼	30·670	6·168	36·838	8·224
½	3·014	·227	3·241	·303	½	31·347	6·338	37·685	8·451
¾	3·281	·260	3·542	·347	¾	32·031	6·510	38·542	8·681
4	3·556	·296	3·852	·395	19	32·722	6·685	39·405	8·913
¼	3·837	·334	4·171	·446	¼	33·420	6·862	40·282	9·150
½	4·125	·375	4·500	·500	½	34·125	7·042	41·167	9·389
¾	4·420	·418	4·838	·557	¾	34·837	7·223	42·060	9·631
5	4·722	·463	5·185	·617	20	35·556	7·407	42·963	9·877
¼	5·031	·510	5·542	·681	¼	36·281	7·594	43·875	10·125
½	5·347	·560	5·907	·747	½	37·014	7·782	44·795	10·377
¾	5·670	·612	6·282	·816	¾	37·753	7·973	45·727	10·631
6	6·000	·667	6·667	·889	21	38·500	8·167	46·667	10·889
¼	6·337	·723	7·060	·965	¼	39·253	8·362	47·616	11·150
½	6·681	·782	7·463	1·044	½	40·014	8·560	48·574	11·413
¾	7·031	·844	7·875	1·125	¾	40·781	8·760	49·542	11·681
7	7·389	·907	8·295	1·209	22	41·556	8·963	50·518	11·951
¼	7·753	·973	8·727	1·298	¼	42·337	9·168	51·505	12·224
½	8·125	1·042	9·167	1·389	½	43·125	9·375	52·500	12·500
¾	8·503	1·112	9·616	1·483	¾	43·920	9·585	53·505	12·779
8	8·889	1·185	10·074	1·580	23	44·722	9·796	54·518	13·061
¼	9·281	1·260	10·542	1·681	¼	45·531	10·010	55·542	13·347
½	9·681	1·338	11·018	1·784	½	46·347	10·227	56·574	13·636
¾	10·087	1·418	11·505	1·890	¾	47·170	10·446	57·616	13·928
9	10·500	1·500	12·000	2·000	24	48·000	10·667	58·667	14·222
¼	10·920	1·584	12·505	2·113	¼	48·837	10·890	59·727	14·520
½	11·347	1·672	13·018	2·229	½	49·681	11·116	60·795	14·821
¾	11·781	1·760	13·542	2·347	¾	50·531	11·344	61·875	15·125
10	12·222	1·852	14·074	2·470	25	51·389	11·574	62·963	15·432
¼	12·670	1·946	14·616	2·594	¼	52·253	11·807	64·060	15·742
½	13·125	2·042	15·167	2·723	½	53·125	12·042	65·167	16·056
¾	13·587	2·140	15·727	2·853	¾	54·003	12·279	66·282	16·372
11	14·056	2·241	16·295	2·988	26	54·889	12·518	67·405	16·691
¼	14·531	2·344	16·875	3·125	¼	55·781	12·760	68·542	17·014
½	15·014	2·449	17·463	3·265	½	56·681	13·004	69·685	17·339
¾	15·503	2·557	18·060	3·409	¾	57·587	13·251	70·838	17·668
12	16·000	2·667	18·667	3·556	27	58·500	13·500	72·000	18·000
¼	16·503	2·779	19·282	3·705	¼	59·420	13·751	73·171	18·335
½	17·014	2·894	19·907	3·859	½	60·347	14·004	74·352	18·672
¾	17·531	3·010	20·542	4·014	¾	61·281	14·260	75·542	19·014
13	18·056	3·129	21·185	4·173	28	62·222	14·518	76·741	19·357
¼	18·587	3·251	21·838	4·335	¼	63·170	14·779	77·949	19·705
½	19·125	3·375	22·500	4·500	½	64·125	15·042	79·167	20·056
¾	19·670	3·501	23·171	4·668	¾	65·087	15·307	80·394	20·409
14	20·222	3·630	23·852	4·839	29	66·056	15·574	81·630	20·765
¼	20·781	3·760	24·542	5·014	¼	67·031	15·844	82·875	21·125
½	21·347	3·894	25·241	5·191	½	68·014	16·116	84·130	21·488
¾	21·920	4·029	25·949	5·372	¾	69·003	16·390	85·394	21·853
15	22·500	4·167	26·667	5·556	30	70·000	16·667	86·667	22·222

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	71·003	16·946	87·949	22·594		143·920	37·918	181·838	50·557
	72·014	17·227	89·241	22·970		145·347	38·338	183·685	51·117
	73·031	17·510	90·542	23·347		146·781	38·760	185·542	51·681
31	74·056	17·796	91·852	23·728	46	148·222	39·185	187·405	52·247
	75·087	18·084	93·171	24·113		149·670	39·612	189·282	52·816
	76·125	18·375	94·500	24·500		151·125	40·042	191·167	53·389
	77·170	18·668	95·838	24·890		152·587	40·473	193·060	53·965
32	78·222	18·963	97·185	25·284	47	154·056	40·907	194·963	54·543
	79·281	19·260	98·542	25·681		155·531	41·344	196·875	55·125
	80·347	19·560	99·907	26·080		157·014	41·782	198·795	55·709
	81·420	19·862	101·282	26·483		158·503	42·223	200·727	56·298
33	82·500	20·167	102·667	26·889	48	160·000	42·667	202·667	56·889
	83·587	20·473	104·060	27·298		161·503	43·112	204·616	57·483
	84·681	20·782	105·463	27·709		163·014	43·560	206·574	58·080
	85·781	21·094	106·875	28·125		164·531	44·010	208·542	58·681
34	86·889	21·407	108·295	28·543	49	166·056	44·463	210·518	59·284
	88·003	21·723	109·727	28·965		167·587	44·918	212·505	59·890
	89·125	22·042	111·167	29·389		169·125	45·375	214·500	60·500
	90·253	22·362	112·616	29·816		170·670	45·834	216·505	61·113
35	91·389	22·685	114·074	30·247	50	172·222	46·296	218·518	61·728
	92·531	23·010	115·542	30·681		173·781	46·760	220·542	62·347
	93·681	23·338	117·018	31·117		175·347	47·227	222·574	62·970
	94·873	23·668	118·505	31·557		176·920	47·696	224·616	63·594
36	96·000	24·000	120·000	32·000	51	178·500	48·167	226·667	64·222
	97·170	24·334	121·505	32·446		180·087	48·640	228·727	64·853
	98·347	24·671	123·018	32·895		181·681	49·116	230·795	65·488
	99·531	25·010	124·542	33·347		183·281	49·594	232·875	66·125
37	100·722	25·352	126·074	33·802	52	184·889	50·074	234·963	66·765
	101·920	25·696	127·616	34·261		186·503	50·557	237·060	67·409
	103·125	26·042	129·167	34·722		188·125	51·042	239·167	68·056
	104·337	26·390	130·727	35·187		189·753	51·529	241·282	68·705
38	105·556	26·741	132·295	35·654	53	191·389	52·018	243·405	69·357
	106·781	27·094	133·875	36·125		193·031	52·510	245·542	70·014
	108·014	27·449	135·463	36·599		194·681	53·004	247·685	70·672
	109·253	27·807	137·060	37·076		196·337	53·501	249·838	71·335
39	110·500	28·167	138·667	37·556	54	198·000	54·000	252·000	72·000
	111·753	28·529	140·282	38·039		199·670	54·501	254·171	72·668
	113·014	28·894	141·907	38·525		201·347	55·004	256·352	73·339
	114·281	29·260	143·542	39·014		203·031	55·510	258·542	74·014
40	115·556	29·630	145·185	39·506	55	204·722	56·018	260·741	74·691
	116·837	30·001	146·838	40·002		206·420	56·529	262·949	75·372
	118·125	30·375	148·500	40·500		208·125	57·042	265·167	76·056
	119·420	30·751	150·171	41·002		209·837	57·557	267·394	76·742
41	120·722	31·129	151·852	41·506	56	211·556	58·074	269·630	77·432
	122·031	31·510	153·542	42·014		213·281	58·594	271·875	78·125
	123·347	31·894	155·241	42·525		215·014	59·116	274·130	78·821
	124·670	32·279	156·949	43·039		216·753	59·640	276·394	79·520
42	126·000	32·667	158·667	43·556	57	218·500	60·167	278·667	80·222
	127·337	33·057	160·394	44·076		220·253	60·696	280·949	80·928
	128·681	33·449	162·130	44·599		222·014	61·227	283·241	81·636
	130·031	33·844	163·875	45·125		223·781	61·760	285·542	82·347
43	131·389	34·241	165·630	45·654	58	225·556	62·296	287·852	83·061
	132·753	34·640	167·394	46·187		227·337	62·834	290·171	83·779
	134·125	35·042	169·167	46·722		229·125	63·375	292·500	84·500
	135·503	35·446	170·949	47·261		230·920	63·918	294·838	85·224
44	136·889	35·852	172·741	47·802	59	232·722	64·463	297·185	85·951
	138·281	36·260	174·542	48·347		234·531	65·010	299·542	86·681
	139·681	36·671	176·352	48·895		236·347	65·560	301·907	87·413
	141·087	37·085	178·171	49·446		238·170	66·112	304·282	88·150
45	142·500	37·500	180·000	50·000	60	240·000	66·667	306·667	88·889

TABLE XIII.—Base 18 Feet—*continued.*

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	·169	·001	·167	·000		18·780	2·871	12·320	·718
	·343	·003	·336	·001		19·232	2·966	12·558	·741
	·521	·007	·505	·002		19·687	3·063	12·797	·766
1	·704	·012	·676	·003	16	20·148	3·161	13·037	·790
	·891	·019	·848	·005		20·613	3·260	13·278	·815
	1·084	·028	1·021	·007		21·084	3·361	13·521	·840
	1·280	·038	1·195	·009		21·558	3·464	13·764	·866
2	1·481	·049	1·370	·012	17	22·037	3·568	14·009	·892
	1·687	·062	1·547	·016		22·521	3·674	14·255	·918
	1·898	·077	1·724	·019		23·009	3·781	14·502	·945
	2·113	·093	1·903	·023		23·502	3·890	14·751	·972
3	2·333	·111	2·083	·028	18	24·000	4·000	15·000	1·000
	2·558	·130	2·264	·033		24·502	4·112	15·251	1·028
	2·787	·151	2·447	·039		25·009	4·225	15·502	1·056
	3·021	·174	2·630	·043		25·521	4·340	15·755	1·085
4	3·260	·197	2·815	·049	19	26·037	4·457	16·009	1·114
	3·502	·223	3·001	·056		26·558	4·575	16·264	1·144
	3·750	·250	3·188	·062		27·084	4·695	16·521	1·174
	4·002	·279	3·376	·070		27·613	4·816	16·778	1·204
5	4·260	·309	3·565	·077	20	28·148	4·939	17·037	1·235
	4·521	·340	3·755	·085		28·687	5·063	17·297	1·266
	4·787	·374	3·947	·093		29·232	5·188	17·558	1·297
	5·058	·408	4·139	·102		29·780	5·316	17·820	1·329
6	5·333	·444	4·333	·111	21	30·333	5·444	18·083	1·361
	5·613	·482	4·528	·121		30·891	5·575	18·348	1·394
	5·898	·522	4·724	·130		31·454	5·707	18·613	1·427
	6·187	·562	4·922	·141		32·021	5·840	18·880	1·460
7	6·481	·605	5·120	·151	22	32·593	5·975	19·148	1·494
	6·780	·649	5·320	·162		33·169	6·112	19·417	1·528
	7·084	·695	5·521	·174		33·750	6·250	19·687	1·562
	7·391	·742	5·723	·185		34·336	6·390	19·959	1·597
8	7·704	·790	5·926	·197	23	34·926	6·531	20·232	1·633
	8·021	·840	6·130	·210		35·521	6·674	20·505	1·668
	8·343	·892	6·336	·223		36·120	6·818	20·780	1·705
	8·669	·945	6·542	·236		36·725	6·964	21·056	1·741
9	9·000	1·000	6·750	·250	24	37·333	7·111	21·333	1·778
	9·336	1·056	6·959	·264		37·947	7·260	21·612	1·815
	9·676	1·115	7·169	·279		38·565	7·411	21·891	1·853
	10·021	1·174	7·380	·293		39·187	7·563	22·172	1·891
10	10·370	1·235	7·593	·309	25	39·815	7·716	22·454	1·929
	10·725	1·297	7·806	·324		40·447	7·871	22·737	1·968
	11·084	1·361	8·021	·340		41·084	8·028	23·021	2·007
	11·447	1·427	8·237	·357		41·725	8·186	23·306	2·046
11	11·815	1·494	8·454	·373	26	42·370	8·347	23·593	2·086
	12·187	1·562	8·672	·391		43·021	8·507	23·880	2·127
	12·565	1·633	8·891	·408		43·676	8·670	24·169	2·167
	12·947	1·704	9·112	·426		44·336	8·834	24·459	2·209
12	13·333	1·778	9·333	·444	27	45·000	9·000	24·750	2·250
	13·725	1·853	9·556	·463		45·669	9·167	25·042	2·292
	14·120	1·929	9·780	·482		46·343	9·336	25·336	2·334
	14·521	2·007	10·005	·502		47·021	9·507	25·630	2·377
13	14·926	2·086	10·232	·521	28	47·704	9·679	25·926	2·420
	15·336	2·167	10·459	·542		48·391	9·853	26·223	2·463
	15·750	2·250	10·687	·562		49·084	10·028	26·521	2·507
	16·169	2·334	10·917	·584		49·780	10·204	26·820	2·551
14	16·593	2·419	11·148	·605	29	50·481	10·383	27·120	2·596
	17·021	2·507	11·380	·627		51·187	10·563	27·422	2·641
	17·454	2·596	11·613	·649		51·898	10·744	27·724	2·686
	17·891	2·686	11·848	·671		52·613	10·927	28·028	2·732
15	18·333	2·778	12·083	·694	30	53·333	11·111	28·333	2·778

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	54·058	11·297	28·639	2·824	¼	106·002	25·279	49·125	6·320
½	54·787	11·485	28·947	2·871	½	107·009	25·559	49·502	6·390
¾	55·521	11·674	29·255	2·918	¾	108·021	25·840	49·880	6·460
31	56·260	11·864	29·565	2·966	46	109·037	26·123	50·259	6·531
¼	57·002	12·056	29·876	3·014	¼	110·058	26·408	50·639	6·602
½	57·750	12·250	30·188	3·062	½	111·084	26·694	51·021	6·673
¾	58·502	12·445	30·501	3·111	¾	112·113	26·982	51·403	6·746
32	59·260	12·642	30·815	3·160	47	113·148	27·272	51·787	6·818
¼	60·021	12·840	31·130	3·210	¼	114·187	27·563	52·172	6·891
½	60·787	13·040	31·447	3·260	½	115·232	27·855	52·558	6·964
¾	61·558	13·242	31·764	3·310	¾	116·280	28·149	52·945	7·037
33	62·333	13·444	32·083	3·361	48	117·333	28·444	53·333	7·111
¼	63·113	13·649	32·403	3·412	¼	118·391	28·742	53·723	7·185
½	63·898	13·855	32·724	3·464	½	119·454	29·040	54·113	7·260
¾	64·687	14·062	33·047	3·516	¾	120·521	29·340	54·505	7·335
34	65·481	14·272	33·370	3·568	49	121·593	29·642	54·898	7·410
¼	66·280	14·482	33·695	3·621	¼	122·669	29·945	55·292	7·486
½	67·084	14·694	34·021	3·674	½	123·750	30·250	55·687	7·562
¾	67·891	14·908	34·348	3·727	¾	124·836	30·556	56·084	7·639
35	68·704	15·123	34·676	3·781	50	125·926	30·864	56·482	7·716
¼	69·521	15·340	35·005	3·835	¼	127·021	31·174	56·880	7·793
½	70·343	15·559	35·336	3·890	½	128·120	31·485	57·280	7·871
¾	71·169	15·779	35·667	3·945	¾	129·225	31·797	57·681	7·949
36	72·000	16·000	36·000	4·000	51	130·333	32·111	58·083	8·028
¼	72·836	16·223	36·334	4·056	¼	131·447	32·427	58·487	8·107
½	73·676	16·447	36·669	4·112	½	132·565	32·744	58·891	8·186
¾	74·521	16·674	37·005	4·168	¾	133·687	33·063	59·297	8·266
37	75·370	16·901	37·343	4·225	52	134·815	33·383	59·704	8·346
¼	76·225	17·130	37·681	4·283	¼	135·947	33·704	60·112	8·426
½	77·084	17·361	38·021	4·340	½	137·084	34·028	60·521	8·507
¾	77·947	17·593	38·362	4·398	¾	138·225	34·353	60·931	8·588
38	78·815	17·827	38·704	4·457	53	139·370	34·679	61·343	8·670
¼	79·687	18·062	39·047	4·516	¼	140·521	35·007	61·755	8·752
½	80·565	18·299	39·391	4·575	½	141·676	35·336	62·169	8·834
¾	81·447	18·538	39·737	4·634	¾	142·836	35·667	62·584	8·917
39	82·333	18·778	40·083	4·694	54	144·000	36·000	63·000	9·000
¼	83·225	19·019	40·431	4·755	¼	145·169	36·334	63·417	9·084
½	84·120	19·263	40·780	4·816	½	146·343	36·670	63·836	9·167
¾	85·021	19·507	41·130	4·877	¾	147·521	37·007	64·255	9·252
40	85·926	19·753	41·482	4·938	55	148·704	37·346	64·676	9·336
¼	86·836	20·001	41·834	5·000	¼	149·891	37·686	65·098	9·421
½	87·750	20·250	42·187	5·062	½	151·084	38·028	65·521	9·507
¾	88·669	20·501	42·542	5·125	¾	152·280	38·371	65·945	9·593
41	89·593	20·753	42·898	5·188	56	153·481	38·716	66·370	9·679
¼	90·521	21·007	43·255	5·252	¼	154·687	39·063	66·797	9·766
½	91·454	21·263	43·613	5·316	½	155·898	39·411	67·224	9·853
¾	92·391	21·519	43·973	5·380	¾	157·113	39·760	67·653	9·940
42	93·333	21·778	44·333	5·444	57	158·333	40·111	68·083	10·028
¼	94·280	22·038	44·695	5·509	¼	159·558	40·464	68·514	10·116
½	95·232	22·299	45·058	5·575	½	160·787	40·818	68·947	10·204
¾	96·187	22·563	45·422	5·641	¾	162·021	41·174	69·380	10·293
43	97·148	22·827	45·787	5·707	58	163·260	41·531	69·815	10·383
¼	98·113	23·093	46·153	5·773	¼	164·502	41·890	70·250	10·472
½	99·084	23·361	46·521	5·840	½	165·750	42·250	70·688	10·563
¾	100·058	23·630	46·889	5·908	¾	167·002	42·612	71·125	10·653
44	101·037	23·901	47·259	5·975	59	168·260	42·975	71·565	10·744
¼	102·021	24·174	47·630	6·043	¼	169·521	43·340	72·005	10·835
½	103·009	24·447	48·002	6·112	½	170·787	43·707	72·447	10·927
¾	104·002	24·723	48·375	6·181	¾	172·058	44·075	72·889	11·019
45	105·000	25·000	48·750	6·250	60	173·333	44·444	73·333	11·111

TABLE XIV.—Base 19 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·365	·004	·370	·005	·361	·003	·354	·001	½
1	·759	·018	·778	·024	·741	·012	·713	·003	1
1½	1·181	·042	1·222	·056	1·139	·028	1·076	·007	1½
2	1·630	·074	1·704	·099	1·556	·049	1·444	·012	2
2½	2·107	·116	2·222	·155	1·991	·077	1·817	·019	2½
3	2·611	·167	2·778	·222	2·444	·111	2·194	·028	3
3½	3·144	·227	3·370	·303	2·917	·151	2·576	·039	3½
4	3·703	·296	4·000	·395	3·407	·197	2·963	·049	4
4½	4·292	·375	4·667	·500	3·917	·250	3·354	·062	4½
5	4·907	·463	5·370	·617	4·444	·309	3·750	·077	5
5½	5·551	·560	6·111	·747	4·991	·374	4·150	·093	5½
6	6·222	·667	6·889	·889	5·556	·444	4·556	·111	6
6½	6·921	·782	7·704	1·044	6·139	·522	4·965	·130	6½
7	7·648	·907	8·556	1·209	6·741	·605	5·380	·151	7
7½	8·402	1·042	9·444	1·389	7·361	·695	5·799	·174	7½
8	9·185	1·185	10·370	1·580	8·000	·790	6·222	·197	8
8½	9·995	1·338	11·333	1·784	8·657	·892	6·650	·223	8½
9	10·833	1·500	12·333	2·000	9·333	1·000	7·083	·250	9
9½	11·699	1·672	13·370	2·229	10·028	1·115	7·521	·279	9½
10	12·593	1·852	14·444	2·470	10·741	1·235	7·963	·309	10
10½	13·514	2·042	15·556	2·723	11·473	1·361	8·410	·340	10½
11	14·462	2·241	16·704	2·988	12·222	1·494	8·861	·373	11
11½	15·440	2·449	17·889	3·265	12·991	1·633	9·317	·408	11½
12	16·444	2·667	19·111	3·556	13·778	1·778	9·778	·444	12
12½	17·477	2·894	20·370	3·859	14·583	1·929	10·243	·482	12½
13	18·537	3·129	21·667	4·173	15·407	2·086	10·713	·521	13
13½	19·625	3·375	23·000	4·500	16·250	2·250	11·187	·562	13½
14	20·739	3·630	24·370	4·839	17·111	2·419	11·667	·605	14
14½	21·885	3·894	25·778	5·191	17·991	2·596	12·150	·649	14½
15	23·056	4·167	27·222	5·556	18·889	2·778	12·639	·694	15
15½	24·255	4·449	28·704	5·933	19·806	2·966	13·132	·741	15½
16	25·481	4·741	30·222	6·321	20·741	3·161	13·630	·790	16
16½	26·735	5·042	31·778	6·723	21·694	3·361	14·132	·840	16½
17	28·019	5·352	33·370	7·136	22·667	3·568	14·639	·892	17
17½	29·328	5·671	35·000	7·562	23·657	3·781	15·150	·945	17½
18	30·667	6·000	36·667	8·000	24·667	4·000	15·667	1·000	18
18½	32·032	6·338	38·370	8·451	25·694	4·225	16·187	1·056	18½
19	33·426	6·685	40·111	8·913	26·741	4·457	16·713	1·114	19
19½	34·847	7·042	41·889	9·389	27·806	4·695	17·243	1·174	19½
20	36·296	7·407	43·704	9·877	28·889	4·939	17·778	1·235	20
20½	37·773	7·782	45·556	10·377	29·991	5·188	18·317	1·297	20½
21	39·278	8·167	47·444	10·889	31·111	5·444	18·861	1·361	21
21½	40·810	8·560	49·370	11·413	32·250	5·707	19·410	1·427	21½
22	42·370	8·963	51·333	11·951	33·407	5·975	19·963	1·494	22
22½	43·958	9·375	53·333	12·500	34·583	6·250	20·521	1·562	22½
23	45·574	9·796	55·370	13·061	35·778	6·531	21·083	1·633	23
23½	47·218	10·227	57·444	13·636	36·991	6·818	21·650	1·705	23½
24	48·889	10·667	59·556	14·222	38·222	7·111	22·222	1·778	24
24½	50·589	11·116	61·704	14·821	39·473	7·411	22·799	1·853	24½
25	52·315	11·574	63·889	15·432	40·741	7·716	23·380	1·929	25
25½	54·069	12·042	66·111	16·056	42·028	8·028	23·965	2·007	25½
26	55·851	12·518	68·370	16·691	43·333	8·347	24·556	2·086	26
26½	57·662	13·004	70·667	17·339	44·657	8·670	25·150	2·167	26½
27	59·500	13·500	73·000	18·000	46·000	9·000	25·750	2·250	27
27½	61·365	14·004	75·370	18·672	47·361	9·336	26·354	2·334	27½
28	63·259	14·518	77·778	19·357	48·741	9·679	26·963	2·420	28
28½	65·180	15·042	80·222	20·056	50·139	10·028	27·576	2·507	28½
29	67·130	15·574	82·704	20·765	51·556	10·383	28·194	2·596	29
29½	69·107	16·116	85·222	21·488	52·991	10·744	28·817	2·686	29½
30	71·111	16·667	87·778	22·222	54·444	11·111	29·444	2·778	30

TABLE XIV.—Base 19 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
30½	73·144	17·227	90·370	22·970	55·917	11·485	30·076	2·871	30½
31	75·203	17·796	93·000	23·728	57·407	11 864	30·713	2·966	31
31½	77·292	18·375	95·667	24·500	58·917	12·250	31·354	3·062	31½
32	79·407	18·963	98·370	25·284	60·444	12·642	32·000	3·160	32
32½	81·551	19·560	101·111	26·080	61·991	13·040	32·650	3·260	32½
33	83·722	20·167	103·889	26 889	63·556	13·444	33·306	3·361	33
33½	85·921	20·782	106·704	27·709	65·139	13·855	33·965	3·464	33½
34	88·148	21·407	109·556	28·543	66·741	14·272	34·630	3·568	34
34½	90·402	22·042	112·444	29·389	68·361	14·694	35·299	3·674	34½
35	92·685	22·685	115·370	30·247	70·000	15·123	35·972	3·781	35
35½	94·995	23·338	118·333	31·117	71·657	15·559	36·650	3·890	35½
36	97·333	24·000	121·333	32·000	73·333	16·000	37·333	4·000	36
36½	99·699	24·671	124·370	32·895	75·028	16·447	38·021	4·112	36½
37	102·093	25·352	127·444	33·802	76·741	16·901	38·713	4·225	37
37½	104·514	26·042	130·556	34·722	78·473	17·361	39·410	4·340	37½
38	106·963	26·741	133·704	35·654	80·222	17·827	40·111	4·457	38
38½	109·440	27·449	136·889	36·599	81·991	18·299	40·817	4·575	38½
39	111·944	28·167	140·111	37·556	83·778	18·778	41·528	4·694	39
39½	114·477	28·894	143·370	38·525	85·583	19·263	42·243	4·816	39½
40	117·036	29·630	146·667	39·506	87·407	19·753	42·963	4·933	40
40½	119·625	30·375	150·000	40·500	89·250	20·250	43·687	5·062	40½
41	122·240	31·129	153·370	41·506	91·111	20·753	44·417	5·188	41
41½	124·884	31·894	156·778	42·525	92·991	21·263	45·150	5·316	41½
42	127·556	32·667	160·222	43·556	94·889	21·778	45·889	5·444	42
42½	130·255	33·449	163·704	44·599	96·806	22·299	46·632	5·575	42½
43	132·981	34·241	167·222	45·654	98·741	22·827	47·380	5·707	43
43½	135·735	35·042	170·778	46·722	100·694	23·361	48·132	5·840	43½
44	138·519	35·852	174·370	47·802	102·667	23·901	48·889	5·975	44
44½	141·328	36·671	178·000	48·895	104·657	24·447	49·650	6·112	44½
45	144·167	37·500	181·667	50·000	106·667	25·000	50·417	6·250	45
45½	147·032	38 338	185·370	51·117	108·694	25·559	51·187	6·390	45½
46	149·926	39·185	189·111	52·247	110·741	26·123	51·963	6·531	46
46½	152·847	40·042	192·889	53·389	112·806	26·694	52·743	6·673	46½
47	155·796	40·907	196·704	54·543	114·889	27·272	53·528	6·818	47
47½	158·773	41·782	200·556	55·709	116·991	27·855	54·317	6·964	47½
48	161·778	42·667	204·444	56·889	119·111	28·444	55·111	7·111	48
48½	164·810	43·560	208·370	58·080	121·250	29·040	55·910	7·260	48½
49	167·870	44·463	212·333	59·284	123·407	29·642	56·713	7·410	49
49½	170·958	45·375	216·333	60·500	125·583	30·250	57·521	7·562	49½
50	174·074	46·296	220·370	61·728	127·778	30·864	58·333	7·716	50
50½	177·218	47·227	224·444	62·970	129·991	31·485	59·150	7·871	50½
51	180·389	48·167	228·556	64·222	132·222	32·111	59·972	8·028	51
51½	183·589	49·116	232·704	65·488	134·473	32·744	60·799	8·186	51½
52	186·815	50·074	236·889	66·765	136·741	33·383	61·630	8·346	52
52½	190·069	51·042	241·111	68·056	139·028	34·028	62·465	8·507	52½
53	193·351	52·018	245·370	69·357	141·333	34·679	63·306	8 670	53
53½	196·662	53·004	249·667	70·672	143·657	35·336	64·150	8·834	53½
54	200·000	54·000	254 000	72·000	146·000	36·000	65·000	9·000	54
54½	203·365	55·004	258·370	73·339	148·361	36·670	65·854	9·167	54½
55	206·759	56·018	262·778	74·691	150·741	37·346	66·713	9·336	55
55½	210·180	57·042	267·222	76·056	153·139	38·028	67·576	9·507	55½
56	213·630	58·074	271·704	77·432	155·556	38·716	68·444	9·679	56
56½	217·107	59·116	276·222	78·821	157·991	39·411	69·317	9·853	56½
57	220·611	60·167	280·778	80·222	160·444	40·111	70·194	10·028	57
57½	224·144	61·227	285·370	81·636	162·917	40·818	71·076	10·204	57½
58	227·703	62·296	290·000	83·061	165·407	41·531	71·963	10·383	58
58½	231·292	63·375	294·667	84·500	167·917	42·250	72·854	10·563	58½
59	234·907	64·463	299·370	85·951	170·444	42·975	73·750	10·744	59
59½	238·551	65·560	304·111	87·413	172·991	43·707	74·650	10·927	59½
60	242·222	66·667	308·889	88·889	175·556	44·444	75·556	11·111	60

TABLE XV.—Base 20 Feet.

Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	·189	·001	·190	·002
½	·384	·004	·389	·005
¾	·587	·010	·597	·014
1	·796	·018	·815	·024
¼	1·013	·029	1·042	·039
½	1·236	·042	1·278	·056
¾	1·466	·057	1·523	·076
2	1·704	·074	1·778	·099
¼	1·948	·094	2 042	·125
½	2·199	·116	2·315	·155
¾	2·457	·140	2·597	·187
3	2·722	·167	2·889	·222
¼	2·994	·196	3·190	·261
½	3·273	·227	3·500	·303
¾	3·559	·260	3·819	·347
4	3·852	·296	4·148	·395
¼	4·152	·334	4·486	·446
½	4·458	·375	4·833	·500
¾	4·772	·418	5·190	·557
5	5·093	·463	5·556	·617
¼	5·420	·510	5·931	·681
½	5·755	·560	6·315	·747
¾	6·096	·612	6·708	·816
6	6·444	·667	7·111	·889
¼	6·800	·723	7·523	·965
½	7·162	·782	7·944	1·044
¾	7·531	·844	8·375	1·125
7	7·907	·907	8·815	1·209
¼	8·291	·973	9·264	1·298
½	8·681	1·042	9·722	1·389
¾	9·078	1·112	10·190	1·483
8	9·481	1·185	10·667	1·580
¼	9·892	1·260	11·153	1·681
½	10·310	1·338	11·648	1·784
¾	10·735	1·418	12·153	1·890
9	11·167	1·500	12·667	2·000
¼	11·605	1·584	13·190	2·113
½	12·051	1·672	13·722	2·229
¾	12·503	1·760	14·264	2·347
10	12·963	1·852	14·815	2·470
¼	13·429	1·946	15·375	2·594
½	13·903	2·042	15·944	2·723
¾	14·383	2·140	16·523	2·853
11	14·870	2·241	17·111	2·988
¼	15·365	2·344	17·708	3·125
½	15·866	2·449	18·315	3·265
¾	16·374	2·557	18·931	3·409
12	16·889	2·667	19·556	3·556
¼	17·411	2·779	20·190	3·705
½	17·940	2·894	20·833	3·859
¾	18·476	3·010	21·486	4·014
13	19·018	3·129	22·148	4·173
¼	19·568	3·251	22·819	4·335
½	20·125	3·375	23·500	4·500
¾	20·689	3·501	24·190	4·668
14	21·259	3·630	24·889	4·839
¼	21·837	3·760	25·597	5·014
½	22·421	3·894	26·315	5·191
¾	23·013	4·029	27·042	5·372
15	23·611	4·167	27·778	5·556

Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	24·217	4·307	28·523	5·742
½	24·829	4·449	29·278	5·933
¾	25·448	4·594	30·042	6·125
16	26·074	4·741	30·815	6·321
¼	26·707	4·890	31·597	6·520
½	27·347	5·042	32·389	6·723
¾	27·994	5·196	33·190	6·928
17	28·648	5·352	34·000	7·136
¼	29·309	5·510	34·819	7·347
½	29·977	5·671	35·648	7·562
¾	30·652	5·835	36·486	7·799
18	31·333	6·000	37·333	8·000
¼	32·022	6·168	38·190	8·224
½	32·718	6·338	39·056	8·451
¾	33·420	6·510	39·931	8·681
19	34·130	6·685	40·815	8·913
¼	34·846	6·862	41·708	9·150
½	35·569	7·042	42·611	9·389
¾	36·300	7·223	43·523	9·631
20	37·037	7·407	44·444	9·877
¼	37·781	7·594	45·375	10·125
½	38·532	7·782	46·315	10·377
¾	39·291	7·973	47·264	10·631
21	40·056	8·167	48·222	10·889
¼	40·828	8·362	49·190	11·150
½	41·606	8·560	50·167	11·413
¾	42·392	8·760	51·153	11·681
22	43·185	8·963	52·148	11·951
¼	43·985	9·168	53·153	12·224
½	44·792	9·375	54·167	12·500
¾	45·605	9·585	55·190	12·779
23	46·426	9·796	56·222	13·061
¼	47·254	10·010	57·264	13·347
½	48·088	10·227	58·315	13·636
¾	48·929	10·446	59·375	13·928
24	49·778	10·667	60·444	14·222
¼	50·633	10·890	61·523	14·520
½	51·495	11·116	62·611	14·821
¾	52·365	11·344	63·708	15·125
25	53·241	11·574	64·815	15·432
¼	54·124	11·807	65·931	15·742
½	55·014	12·042	67·056	16·056
¾	55·911	12·279	68·190	16·372
26	56·815	12·518	69·333	16·691
¼	57·726	12·760	70·486	17·014
½	58·644	13·004	71·648	17·339
¾	59·568	13·251	72·819	17·668
27	60·500	13·500	74·000	18·000
¼	61·439	13·751	75·190	18·335
½	62·384	14·004	76·389	18·672
¾	63·337	14·260	77·597	19·014
28	64·296	14·518	78·815	19·357
¼	65·263	14·779	80·042	19·705
½	66·236	15·042	81·278	20·056
¾	67·216	15·307	82·523	20·409
29	68·204	15·574	83·778	20·765
¼	69·198	15·844	85·042	21·125
½	70·199	16·116	86·315	21·488
¾	71·207	16·390	87·597	21·853
30	72·222	16·667	88·889	22·222

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	73·244	16·946	90·190	22·594		147·272	37·918	185·190	50·557
¼	74·273	17·227	91·500	22·970	¼	148·718	38·338	187·056	51·117
½	75·309	17·510	92·819	23·347	½	150·170	38·760	188·931	51·681
31	76·352	17·796	94·148	23·728	46	151·630	39·185	190·815	52·247
¼	77·402	18·084	95·486	24·113	¼	153·096	39·612	192·708	52·816
½	78·458	18·375	96·833	24·500	½	154·569	40·042	194·611	53·389
¾	79·522	18·668	98·190	24·890	¾	156·050	40·473	196·523	53·965
32	80·593	18·963	99·556	25·284	47	157·537	40·907	198·444	54·543
¼	81·670	19·260	100·931	25·681	¼	159·031	41·344	200·375	55·125
½	82·755	19·560	102·315	26·080	½	160·532	41·782	202·315	55·709
¾	83·846	19·862	103·708	26·483	¾	162·040	42·223	204·264	56·298
33	84·944	20·167	105·111	26·889	48	163·556	42·667	206·222	56·889
¼	86·050	20·473	106·523	27·298	¼	165·078	43·112	208·190	57·483
½	87·162	20·782	107·944	27·709	½	166·606	43·560	210·167	58·080
¾	88·281	21·094	109·375	28·125	¾	168·142	44·010	212·153	58·681
34	89·407	21·407	110·815	28·543	49	169·685	44·463	214·148	59·284
¼	90·541	21·723	112·264	28·965	¼	171·235	44·918	216·153	59·890
½	91·681	22·042	113·722	29·389	½	172·792	45·375	218·167	60·500
¾	92·828	22·362	115·190	29·816	¾	174·355	45·834	220·190	61·113
35	93·981	22·685	116·667	30·247	50	175·926	46·296	222·222	61·728
¼	95·142	23·010	118·153	30·681	¼	177·503	46·760	224·264	62·347
½	96·310	23·338	119·648	31·117	½	179·088	47·227	226·315	62·970
¾	97·485	23·668	121·153	31·557	¾	180·679	47·696	228·375	63·594
36	98·667	24·000	122·667	32·000	51	182·278	48·167	230·444	64·222
¼	99·855	24·334	124·190	32·446	¼	183·883	48·640	232·523	64·853
½	101·051	24·671	125·722	32·895	½	185·495	49·116	234·611	65·488
¾	102·253	25·010	127·264	33·347	¾	187·115	49·594	236·708	66·125
37	103·463	25·352	128·815	33·802	52	188·741	50·074	238·815	66·765
¼	104·679	25·696	130·375	34·261	¼	190·374	50·557	240·931	67·409
½	105·903	26·042	131·944	34·722	½	192·014	51·042	243·056	68·056
¾	107·133	26·390	133·523	35·187	¾	193·661	51·529	245·190	68·705
38	108·370	26·741	135·111	35·654	53	195·315	52·018	247·333	69·357
¼	109·615	27·094	136·708	36·125	¼	196·976	52·510	249·486	70·014
½	110·866	27·449	138·315	36·599	½	198·644	53·004	251·648	70·672
¾	112·124	27·807	139·931	37·076	¾	200·318	53·501	253·819	71·335
39	113·389	28·167	141·556	37·556	54	202·000	54·000	256·000	72·000
¼	114·661	28·529	143·190	38·039	¼	203·689	54·501	258·190	72·668
½	115·940	28·894	144·833	38·525	½	205·384	55·004	260·389	73·339
¾	117·226	29·260	146·486	39·014	¾	207·087	55·510	262·597	74·014
40	118·518	29·630	148·148	39·506	55	208·796	56·018	264·815	74·691
¼	119·818	30·001	149·819	40·002	¼	210·513	56·529	267·042	75·372
½	121·125	30·375	151·500	40·500	½	212·236	57·042	269·278	76·056
¾	122·439	30·751	153·190	41·002	¾	213·966	57·557	271·523	76·742
41	123·759	31·129	154·889	41·506	56	215·704	58·074	273·778	77·432
¼	125·087	31·510	156·597	42·014	¼	217·448	58·594	276·042	78·125
½	126·421	31·894	158·315	42·525	½	219·199	59·116	278·315	78·821
¾	127·763	32·279	160·042	43·039	¾	220·957	59·640	280·597	79·520
42	129·111	32·667	161·778	43·556	57	222·722	60·167	282·889	80·222
¼	130·466	33·057	163·523	44·076	¼	224·494	60·696	285·190	80·928
½	131·829	33·449	165·278	44·599	½	226·273	61·227	287·500	81·636
¾	133·198	33·844	167·042	45·125	¾	228·059	61·760	289·819	82·347
43	134·574	34·241	168·815	45·654	58	229·852	62·296	292·148	83·061
¼	135·957	34·640	170·597	46·187	¼	231·165	62·834	294·486	83·779
½	137·347	35·042	172·389	46·722	½	233·458	63·375	296·833	84·500
¾	138·744	35·446	174·190	47·261	¾	235·272	63·918	299·190	85·224
44	140·148	35·852	176·000	47·802	59	237·093	64·463	301·556	85·951
¼	141·559	36·260	177·819	48·347	¼	238·920	65·010	303·931	86·681
½	142·977	36·671	179·648	48·895	½	240·755	65·560	306·315	87·413
¾	144·402	37·085	181·486	49·446	¾	242·596	66·112	308·708	88·150
45	145·833	37·500	183·333	50·000	60	244·444	66·667	311·111	88·889

TABLE XV.—Base 20 Feet—*continued.*

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights	Centre and Slopes.	Add half difference of heights
	·187	·001	·186	·000		19·910	2·871	13·449	·718
	·380	·003	·373	·001		20·380	2·966	13·706	·741
	·576	·007	·561	·002		20·854	3·063	13·963	·766
1	·778	·012	·750	·003	16	21·333	3·161	14·222	·790
	·984	·019	·940	·005		21·817	3·260	14·482	·815
	1·194	·028	1·132	·007		22·306	3·361	14·743	·840
	1·410	·038	1·325	·009		22·799	3·464	15·005	·866
2	1·630	·049	1·519	·012	17	23·296	3·568	15·269	·892
	1·854	·062	1·714	·016		23·799	3·674	15·533	·918
	2·083	·077	1·910	·019		24·306	3·781	15·799	·945
	2·317	·093	2·107	·023		24·817	3·890	16·065	·972
3	2·556	·111	2·306	·028	18	25·333	4·000	16·333	1·000
	2·799	·130	2·505	·033		25·854	4·112	16·602	1·028
	3·046	·151	2·706	·039		26·380	4·225	16·873	1·056
	3·299	·174	2·908	·043		26·910	4·340	17·144	1·085
4	3·556	·197	3·111	·049	19	27·444	4·457	17·417	1·114
	3·817	·223	3·315	·056		27·984	4·575	17·690	1·144
	4·083	·250	3 521	·062		28·528	4·695	17·965	1·174
	4·354	·279	3·727	·070		29·076	4·816	18·241	1·204
5	4·630	·309	3·935	·077	20	29·630	4·939	18·519	1·235
	4·910	·340	4·144	·085		30·187	5·063	18·797	1·266
	5·194	·374	4·354	·093		30·750	5·188	19·076	1·297
	5·484	·408	4·565	·102		31·317	5·316	19·357	1·329
6	5·778	·444	4·778	·111	21	31·889	5·444	19·639	1·361
	6·076	·482	4·991	·121		32·465	5·575	19·922	1·394
	6·380	·522	5·206	·130		33·046	5·707	20·206	1·427
	6·687	·562	5·422	·141		33·632	5·840	20·491	1·460
7	7·000	·605	5·639	·151	22	34·222	5·975	20·778	1·494
	7·317	·649	5·857	·162		34·817	6·112	21·065	1·528
	7·639	·695	6·076	·174		35·417	6·250	21·354	1·562
	7·965	·742	6·297	·185		36·021	6·390	21·644	1·597
8	8·296	·790	6·519	·197	23	36·630	6·531	21·935	1·633
	8·632	·840	6·741	·210		37·243	6·674	22·227	1·668
	8·972	·892	6·965	·223		37·861	6·818	22·521	1·705
	9·317	·945	7·190	·236		38·484	6·964	22·815	1·741
9	9·667	1·000	7·417	·250	24	39·111	7·111	23·111	1·778
	10·021	1·056	7·644	·264		39·743	7·260	23·408	1·815
	10·380	1·115	7·873	·279		40·380	7·411	23·706	1·853
	10·743	1·174	8·102	·293		41·021	7·563	24·005	1·891
10	11·111	1·235	8·333	·309	25	41·667	7·716	24·306	1·929
	11·484	1·297	8·565	·324		42·317	7·871	24·607	1·968
	11·861	1·361	8·799	·340		42·972	8·028	24·910	2·007
	12·243	1·427	9·033	·357		43·632	8·186	25·214	2·046
11	12·630	1·494	9·269	·373	26	44·296	8·347	25·519	2·086
	13·021	1·562	9·505	·391		44·965	8·507	25·825	2·127
	13·417	1·633	9·743	·408		45·639	8·670	26·132	2·167
	13·817	1·704	9·982	·426		46·317	8·834	26·440	2·209
12	14·222	1·778	10·222	·444	27	47·000	9·000	26·750	2·250
	14·632	1·853	10·463	·463		47·687	9·167	27·061	2·292
	15·046	1·929	10·706	·482		48·380	9·336	27·373	2·334
	15·465	2·007	10·949	·502		49·076	9·507	27·686	2·377
13	15·889	2·086	11·194	·521	28	49·778	9·679	28·000	2·420
	16·317	2·167	11·440	·542		50·484	9·853	28·315	2·463
	16·750	2·250	11·688	·562		51·194	10·028	28·632	2·507
	17·187	2·334	11·936	·584		51·910	10·204	28·950	2·551
14	17·630	2·419	12·185	·605	29	52·630	10·383	29·268	2·596
	18·076	2·507	12·436	·627		53·354	10·563	29·588	2·641
	18·528	2·596	12·688	·649		54·083	10·744	29·910	2·686
	18·984	2·686	12·940	·671		54·817	10·927	30·232	2·732
15	19·444	2·778	13·194	·694	30	55·556	11·111	30·556	2·778

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	56·299	11·297	30·880	2·824	¼	109·354	25·279	52·477	6·320
½	57·046	11·485	31·206	2·871	½	110·380	25·559	52·873	6·390
¾	57·799	11·674	31·533	2·918	¾	111·410	25·840	53·269	6·460
31	58·556	11·864	31·861	2·966	46	112·444	26·123	53·667	6·531
¼	59·317	12·056	32·190	3·014	¼	113·484	26·408	54·065	6·602
½	60·083	12·250	32·521	3·062	½	114·528	26·694	54·465	6·673
¾	60·854	12·445	32·852	3·111	¾	115·576	26·982	54·866	6·746
32	61·630	12·642	33·185	3·160	47	116·630	27·272	55·269	6·818
¼	62·410	12·840	33·519	3·210	¼	117·687	27·563	55·672	6·891
½	63·194	13·040	33·854	3·260	½	118·750	27·855	56·076	6·964
¾	63·984	13·242	34·190	3·310	¾	119·817	28·149	56·482	7·037
33	64·778	13·444	34·528	3·361	48	120·889	28·444	56·889	7·111
¼	65·576	13·649	34·866	3·412	¼	121·965	28·742	57·297	7·185
½	66·380	13·855	35·206	3·464	½	123·046	29·040	57·706	7·260
¾	67·187	14·062	35·547	3·516	¾	124·132	29·340	58·116	7·335
34	68·000	14·272	35·889	3·568	49	125·222	29·642	58·528	7·410
¼	68·817	14·482	36·232	3·621	¼	126·317	29·945	58·940	7·486
½	69·639	14·694	36·576	3·674	½	127·417	30·250	59·354	7·562
¾	70·465	14·908	36·922	3·727	¾	128·521	30·556	59·769	7·639
35	71·296	15·123	37·269	3·781	50	129·630	30·864	60·185	7·716
¼	72·132	15·340	37·616	3·835	¼	130·743	31·174	60·602	7·793
½	72·972	15·559	37·965	3·890	½	131·861	31·485	61·021	7 871
¾	73·817	15·779	38·315	3·945	¾	132·984	31·797	61·440	7·949
36	74·667	16·000	38·667	4·000	51	134·111	32·111	61·861	8·028
¼	75·521	16·223	39·019	4·056	¼	135·243	32·427	62·283	8·107
½	76·380	16·447	39·373	4·112	½	136·380	32·744	62·706	8 186
¾	77·243	16·674	39·727	4·168	¾	137·521	33·063	63·130	8·266
37	78·111	16·901	40·083	4·225	52	138·667	33·383	63·556	8·346
¼	78·984	17·130	40·440	4·283	¼	139·817	33·704	63·982	8·426
½	79·861	17·361	40·799	4 340	½	140·972	34 028	64·410	8·507
¾	80·743	17·593	41·158	4·398	¾	142·132	34·353	64·838	8·588
38	81·630	17·827	41·519	4·457	53	143·296	34·679	65·268	8·670
¼	82·521	18·062	41·880	4·516	¼	144·465	35·007	65·699	8·752
½	83·417	18·299	42·243	4·575	½	145·639	35·336	66·132	8·834
¾	84·317	18·538	42·607	4·634	¾	146·817	35·667	66·565	8·917
39	85·222	18·778	42·972	4·694	54	148·000	36·000	67·000	9·000
¼	86·132	19·019	43·338	4·755	¼	149·187	36·334	67·436	9·084
½	87·046	19·263	43·706	4·816	½	150·380	36 670	67·873	9·167
¾	87·965	19·507	44·074	4·877	¾	151·576	37·007	68·311	9·252
40	88·889	19·753	44·444	4·938	55	152·778	37·346	68·750	9·336
¼	89·817	20·001	44·815	5·000	¼	153·984	37·686	69·190	9·421
½	90·750	20·250	45·188	5·062	½	155·194	38·028	69·632	9·507
¾	91·687	20·501	45·561	5·125	¾	156·410	38·371	70·074	9·593
41	92·630	20·753	45·935	5·188	56	157·630	38·716	70·519	9·679
¼	93·576	21·007	46·311	5·252	¼	158·854	39·063	70·963	9·766
½	94·528	21·263	46·688	5·316	½	160·083	39·411	71·410	9·853
¾	95·484	21·519	47·065	5·380	¾	161·317	39·760	71·857	9·940
42	96·444	21·778	47·444	5·444	57	162·556	40·111	72·306	10·028
¼	97·410	22·038	47·824	5·509	¼	163·799	40·464	72·755	10·116
½	98·380	22·299	48·206	5·575	½	165·046	40·818	73·206	10·204
¾	99·354	22·563	48·588	5·641	¾	166·299	41·174	73·658	10·293
43	100·333	22·827	48·972	5·707	58	167·556	41·531	74·111	10·383
¼	101·317	23·093	49·357	5·773	¼	168·817	41·890	74·565	10·472
½	102·306	23·361	49·743	5·840	½	170·083	42·250	75·021	10 563
¾	103·299	23·630	50·130	5·908	¾	171·354	42·612	75·477	10·653
44	104·296	23·901	50·518	5·975	59	172·630	42·975	75·935	10·744
¼	105·299	24·174	50·908	6·043	¼	173·910	43·340	76·394	10·835
½	106·306	24·447	51·299	6·112	½	175·194	43·707	76·854	10·927
¾	107·317	24·723	51·690	6·181	¾	176·484	44·075	77·315	11·019
45	108·333	25·000	52·083	6·250	60	177·778	44·444	77·778	11·111

TABLE XVI.—Base 21 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·403	·004	·407	·005	·398	·003	·391	·001	½
1	·833	·018	·852	·024	·815	·012	·787	·003	1
1½	1·292	·042	1·333	·056	1·250	·028	1·187	·007	1½
2	1·778	·074	1·852	·099	1·704	·049	1·593	·012	2
2½	2·292	·116	2·407	·155	2·176	·077	2·002	·019	2½
3	2·833	·167	3·000	·222	2·667	·111	2·417	·028	3
3½	3·403	·227	3·630	·303	3·176	·151	2·836	·039	3½
4	4·000	·296	4·296	·395	3·704	·197	3·259	·049	4
4½	4·625	·375	5·000	·500	4·250	·250	3·687	·062	4½
5	5·278	·463	5·741	·617	4·815	·309	4·120	·077	5
5½	5·958	·560	6·519	·747	5·398	·374	4·558	·093	5½
6	6·667	·667	7·333	·889	6·000	·444	5·000	·111	6
6½	7·403	·782	8·185	1·044	6·620	·522	5·447	·130	6½
7	8·167	·907	9·074	1·209	7·259	·605	5·898	·151	7
7½	8·958	1·042	10·000	1·389	7·917	·695	6·354	·174	7½
8	9·778	1·185	10·963	1·580	8·593	·790	6·815	·197	8
8½	10·625	1·338	11·963	1·784	9·287	·892	7·280	·223	8½
9	11·500	1·500	13·000	2·000	10·000	1·000	7·750	·250	9
9½	12·403	1·672	14·074	2·229	10·731	1·115	8·225	·279	9½
10	13·333	1·852	15·185	2·470	11·481	1·235	8·704	·309	10
10½	14·292	2·042	16·333	2·723	12·250	1·361	9·187	·340	10½
11	15·278	2·241	17·519	2·988	13·037	1·494	9·676	·373	11
11½	16·292	2·449	18·741	3·265	13·843	1·633	10·169	·408	11½
12	17·333	2·667	20·000	3·556	14·667	1·778	10·667	·444	12
12½	18·403	2·894	21·296	3·859	15·509	1·929	11·169	·482	12½
13	19·500	3·129	22·630	4·173	16·370	2·086	11·676	·521	13
13½	20·625	3·375	24·000	4·500	17·250	2·250	12·187	·562	13½
14	21·778	3·630	25·407	4·839	18·148	2·419	12·704	·605	14
14½	22·958	3·894	26·852	5·191	19·065	2·596	13·225	·649	14½
15	24·167	4·167	28·333	5·556	20·000	2·778	13·750	·694	15
15½	25·403	4·449	29·852	5·933	20·954	2·966	14·280	·741	15½
16	26·667	4·741	31·407	6·321	21·926	3·161	14·815	·790	16
16½	27·958	5·042	33·000	6·723	22·917	3·361	15·354	·840	16½
17	29·278	5·352	34·630	7·136	23·926	3·568	15·898	·892	17
17½	30·625	5·671	36·296	7·562	24·954	3·781	16·447	·945	17½
18	32·000	6·000	38·000	8·000	26·000	4·000	17·000	1·000	18
18½	33·403	6·338	39·741	8·451	27·065	4·225	17·558	1·056	18½
19	34·833	6·685	41·519	8·913	28·148	4·457	18·120	1·114	19
19½	36·292	7·042	43·333	9·389	29·250	4·695	18·687	1·174	19½
20	37·778	7·407	45·185	9·877	30·370	4·939	19·259	1·235	20
20½	39·292	7·782	47·074	10·377	31·509	5·188	19·836	1·297	20½
21	40·833	8·167	49·000	10·889	32·667	5·444	20·417	1·361	21
21½	42·403	8·560	50·963	11·413	33·843	5·707	21·002	1·427	21½
22	44·000	8·963	52·963	11·951	35·037	5·975	21·593	1·494	22
22½	45·625	9·375	55·000	12·500	36·250	6·250	22·187	1·562	22½
23	47·278	9·796	57·074	13·061	37·481	6·531	22·787	1·633	23
23½	48·958	10·227	59·185	13·636	38·731	6·818	23·391	1·705	23½
24	50·667	10·667	61·333	14·222	40·000	7·111	24·000	1·778	24
24½	52·403	11·116	63·519	14·821	41·287	7·411	24·613	1·853	24½
25	54·167	11·574	65·741	15·432	42·593	7·716	25·231	1·929	25
25½	55·958	12·042	68·000	16·056	43·917	8·028	25·854	2·007	25½
26	57·778	12·518	70·296	16·691	45·259	8·347	26·481	2·086	26
26½	59·625	13·004	72·630	17·339	46·620	8·670	27·113	2·167	26½
27	61·500	13 500	75·000	18·000	48·000	9·000	27·750	2·250	27
27½	63·403	14·004	77·407	18·672	49·398	9·336	28·391	2·334	27½
28	65·333	14·518	79·852	19·357	50·815	9·679	29·037	2·420	28
28½	67·292	15·042	82·333	20·056	52·250	10·028	29·687	2·507	28½
29	69·278	15·574	84 852	20·765	53·704	10·383	30·343	2·596	29
29½	71·292	16·116	87·407	21·488	55·176	10·744	31·002	2·686	29½
30	73·333	16·667	90·000	22·222	56·667	11·111	31·667	2·778	30

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights	Centre and Slopes.	Add half difference of heights	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
30½	75·403	17·227	92·630	22·970	58·176	11·485	32·336	2·871	30½
31	77·500	17·796	95·296	23·728	59·704	11·864	33·009	2·966	31
31½	79·625	18·375	98·000	24·500	61·250	12·250	33·687	3·062	31½
32	81·778	18·963	100·741	25·284	62·815	12·642	34·370	3·160	32
32½	83·958	19·560	103·519	26·080	64·398	13·040	35·058	3·260	32½
33	86·167	20·167	106·333	26·889	66·000	13·444	35·750	3·361	33
33½	88·403	20·782	109·185	27·709	67·620	13·855	36·447	3·464	33½
34	90·667	21·407	112·074	28·543	69·259	14·272	37·148	3·568	34
34½	92·958	22·042	115·000	29·389	70·917	14·694	37·854	3·674	34½
35	95·278	22·685	117·963	30·247	72·593	15·123	38·565	3·781	35
35½	97·625	23·338	120·963	31·117	74·287	15·559	39·280	3·890	35½
36	100·000	24·000	124·000	32·000	76·000	16·000	40·000	4·000	36
36½	102·403	24·671	127·074	32·895	77·731	16·447	40·725	4·112	36½
37	104·833	25·352	130·185	33·802	79·481	16·901	41·454	4·225	37
37½	107·292	26·042	133·333	34·722	81·250	17·361	42·187	4·340	37½
38	109·778	26·741	136·519	35·654	83·037	17·827	42·926	4·457	38
38½	112·292	27·449	139·741	36·599	84·843	18·299	43·669	4·575	38½
39	114·833	28·167	143·000	37·556	86·667	18·778	44·417	4·694	39
39½	117·403	28·894	146·296	38·525	88·509	19·263	45·169	4·816	39½
40	120·000	29·630	149·630	39·506	90·370	19·753	45·926	4·938	40
40½	122·625	30·375	153·000	40·500	92·250	20·250	46·687	5·062	40½
41	125·278	31·129	156·407	41·506	94·148	20·753	47·454	5·188	41
41½	127·958	31·894	159·852	42·525	96·065	21·263	48·225	5·316	41½
42	130·667	32·667	163·333	43·556	98·000	21·778	49·000	5·444	42
42½	133·403	33·449	166·852	44·599	99·954	22·299	49·780	5·575	42½
43	136·167	34·241	170·407	45·654	101·926	22·827	50·565	5·707	43
43½	138·958	35·042	174·000	46·722	103·917	23·361	51·354	5·840	43½
44	141·778	35·852	177·630	47·802	105·926	23·901	52·148	5·975	44
44½	144·625	36·671	181·296	48·895	107·954	24·447	52·947	6·112	44½
45	147·500	37·500	185·000	50·000	110·000	25·000	53·750	6·250	45
45½	150·403	38·338	188·741	51·117	112·065	25·559	54·558	6·390	45½
46	153·333	39·185	192·519	52·247	114·148	26·123	55·370	6·531	46
46½	156·292	40·042	196·333	53·389	116·250	26·694	56·187	6·673	46½
47	159·278	40·907	200·185	54·543	118·370	27·272	57·009	6·818	47
47½	162·292	41·782	204·074	55·709	120·509	27·855	57·836	6·964	47½
48	165·333	42·667	208·000	56·889	122·667	28·444	58·667	7·111	48
48½	168·403	43·560	211·963	58·080	124·843	29·040	59·502	7·260	48½
49	171·500	44·463	215·963	59·284	127·037	29·642	60·343	7·410	49
49½	174·625	45·375	220·000	60·500	129·250	30·250	61·187	7·562	49½
50	177·778	46·296	224·074	61·728	131·481	30·864	62·037	7·716	50
50½	180·958	47·227	228·185	62·970	133·731	31·485	62·891	7·871	50½
51	184·167	48·167	232·333	64·222	136·000	32·111	63·750	8·028	51
51½	187·403	49·116	236·519	65·488	138·287	32·744	64·613	8·186	51½
52	190·667	50·074	240·741	66·765	140·593	33·383	65·481	8·346	52
52½	193·958	51·042	245·000	68·056	142·917	34·028	66·354	8·507	52½
53	197·278	52·018	249·296	69·357	145·259	34·679	67·231	8·670	53
53½	200·625	53·004	253·630	70·672	147·620	35·336	68·113	8·834	53½
54	204·000	54·000	258·000	72·000	150·000	36·000	69·000	9·000	54
54½	207·403	55·004	262·407	73·339	152·398	36·670	69·891	9·167	54½
55	210·833	56·018	266·852	74·691	154·815	37·346	70·787	9·336	55
55½	214·292	57·042	271·333	76·056	157·250	38·028	71·687	9·507	55½
56	217·778	58·074	275·852	77·432	159·704	38·716	72·593	9·679	56
56½	221·292	59·116	280·407	78·821	162·176	39·411	73·502	9·853	56½
57	224·833	60·167	285·000	80·222	164·667	40·111	74·417	10·028	57
57½	228·403	61·227	289·630	81·636	167·176	40·818	75·336	10·204	57½
58	232·000	62·296	294·296	83·061	169·704	41·531	76·259	10·383	58
58½	235·625	63·375	299·000	84·500	172·250	42·250	77·187	10·563	58½
59	239·278	64·463	303·741	85·951	174·815	42·975	78·120	10·744	59
59½	242·958	65·560	308·519	87·413	177·398	43·707	79·058	10·927	59½
60	246·667	66·667	313·333	88·889	180·000	44·444	80·000	11·111	60

TABLE XVII.—Base 22 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·421	·004	·426	·005	·417	·003	·410	·001	½
1	·870	·018	·889	·024	·852	·012	·824	·003	1
1½	1·346	·042	1·389	·056	1·306	·028	1·243	·007	1½
2	1·852	·074	1·926	·099	1·778	·049	1·667	·012	2
2½	2·384	·116	2·500	·155	2·269	·077	2·095	·019	2½
3	2·944	·167	3·111	·222	2·778	·111	2·528	·028	3
3½	3·531	·227	3·759	·303	3·306	·151	2·965	·039	3½
4	4·147	·296	4·444	·395	3·852	·197	3·407	·049	4
4½	4·791	·375	5·167	·500	4·417	·250	3·854	·062	4½
5	5·462	·463	5·926	·617	5·000	·309	4·306	·077	5
5½	6·162	·560	6·722	·747	5·602	·374	4·762	·093	5½
6	6·889	·667	7·556	·889	6·222	·444	5·222	·111	6
6½	7·642	·782	8·426	1·044	6·861	·522	5·687	·130	6½
7	8·424	·907	9·333	1·209	7·519	·605	6·157	·151	7
7½	9·236	1·042	10·278	1·389	8·194	·695	6·632	·174	7½
8	10·074	1·185	11·259	1·580	8·889	·790	7·111	·197	8
8½	10·940	1·338	12·278	1·784	9·602	·892	7·595	·223	8½
9	11·833	1·500	13·333	2·000	10·333	1·000	8·083	·250	9
9½	12·755	1·672	14·426	2·229	11·083	1·115	8·576	·279	9½
10	13·704	1·852	15·556	2·470	11·852	1·235	9·074	·309	10
10½	14·680	2·042	16·722	2·723	12·639	1·361	9·576	·340	10½
11	15·685	2·241	17·926	2·988	13·444	1·494	10·083	·373	11
11½	16·718	2·449	19·167	3·265	14·269	1·633	10·595	·408	11½
12	17·778	2·667	20·444	3·556	15·111	1·778	11·111	·444	12
12½	18 865	2·894	21·759	3·859	15·972	1·929	11·632	·482	12½
13	19·981	3·129	23·111	4·173	16·852	2·086	12·157	·521	13
13½	21·125	3·375	24·500	4·500	17·750	2·250	12·687	·562	13½
14	22·296	3·630	25·926	4·839	18·667	2·419	13·222	·605	14
14½	23·494	3·894	27·389	5·191	19·602	2·596	13·762	·649	14½
15	24·721	4·167	28·889	5·556	20·556	2·778	14·306	·694	15
15½	25·976	4·449	30·426	5·933	21·528	2·966	14·854	·741	15½
16	27·258	4·741	32·000	6 321	22·519	3·161	15·407	·790	16
16½	28·568	5·042	33·611	6·723	23·528	3·361	15·965	·840	16½
17	29·907	5·352	35·259	7·136	24·556	3·568	16·528	·892	17
17½	31·273	5·671	36·944	7·562	25·602	3·781	17·095	·945	17½
18	32·667	6·000	38·667	8·000	26·667	4·000	17·667	1·000	18
18½	34·087	6·338	40·426	8·451	27·750	4·225	18·243	1·056	18½
19	35·537	6·685	42·222	8·913	28·852	4·457	18·824	1·114	19
19½	37·013	7·042	44·056	9·389	29·972	4·695	19·410	1·174	19½
20	38·518	7·407	45·926	9·877	31·111	4·939	20·000	1·235	20
20½	40·050	7·782	47·833	10·377	32·269	5·188	20·595	1·297	20½
21	41·610	8·167	49·778	10 889	33·444	5·444	21·194	1·361	21
21½	43·198	8·560	51·759	11·413	34·639	5·707	21·799	1·427	21½
22	44·815	8·963	53·778	11·951	35·852	5·975	22·407	1·494	22
22½	46·458	9·375	55·833	12·500	37·083	6·250	23·021	1·562	22½
23	48·130	9·796	57·926	13·061	38·333	6·531	23·639	1·633	23
23½	49·829	10·227	60·056	13·636	39·602	6·818	24·262	1·705	23½
24	51·556	10·667	62·222	14·222	40·889	7·111	24·889	1·778	24
24½	53·311	11·116	64·426	14·821	42·194	7·411	25·521	1·853	24½
25	55·093	11·574	66·667	15·432	43·519	7·716	26·157	1·929	25
25½	56·903	12·042	68·944	16·056	44·861	8·028	26·799	2·007	25½
26	58·741	12·518	71·259	16·691	46·222	8·347	27·444	2·086	26
26½	60·607	13·004	73·611	17·339	47·602	8·670	28·095	2·167	26½
27	62·500	13·500	76·000	18·000	49·000	9·000	28·750	2·250	27
27	64·421	14·004	78·426	18·672	50·417	9·336	29·410	2·334	27½
28	66·371	14·518	80·889	19·357	51·852	9·679	30·074	2·420	28
28½	68·348	15·042	83·389	20·056	53·306	10·028	30·743	2·507	28½
29	70·351	15·574	85·926	20·765	54·778	10·383	31·417	2·596	29
29½	72·383	16·116	88·500	21·488	56·269	10·744	32·095	2·686	29½
30	74·444	16·667	91·111	22·222	57·778	11·111	32·778	2·778	30

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights	Centre and Slopes.	Add half difference of heights.	
30½	76·531	17·227	93·759	22·970	59·306	11·485	33·465	2·871	30½
31	78·648	17·796	96·444	23·728	60·852	11·864	34·157	2·966	31
31½	80·791	18·375	99·167	24·500	62·417	12·250	34·854	3·062	31½
32	82·963	18·963	101·926	25·284	64·000	12·642	35·556	3·160	32
32½	85·161	19·560	104·722	26·080	65·602	13·040	36·262	3·260	32½
33	87·389	20·167	107·556	26·889	67·222	13·444	36·972	3·361	33
33½	89·642	20·782	110·426	27·709	68·861	13·855	37·687	3·464	33½
34	91·925	21·407	113·333	28·543	70·519	14·272	38·407	3·568	34
34½	94·236	22·042	116·278	29·389	72·194	14·694	39·132	3·674	34½
35	96·573	22·685	119·259	30·247	73·889	15·123	39·861	3·781	35
35½	98·940	23·338	122·278	31·117	75·602	15·559	40·595	3·890	35½
36	101·333	24·000	125·333	32·000	77·333	16·000	41·333	4·000	36
36½	103·753	24·671	128·426	32·895	79·083	16·447	42·076	4·112	36½
37	106·204	25·352	131·556	33 802	80·852	16·901	42·824	4·225	37
37½	108·680	26·042	134·722	34·722	82·639	17·361	43·576	4·340	37½
38	111·185	26·741	137·926	35·654	84·444	17·827	44·333	4·457	38
38½	113·718	27·449	141·167	36·599	86·269	18·299	45·095	4·575	38½
39	116·278	28·167	144·444	37·556	88·111	18·778	45·861	4·694	39
39½	118·866	28·894	147·759	38·525	89·972	19·263	46·632	4·816	39½
40	121·481	29·630	151·111	39·506	91·852	19·753	47·407	4·938	40
40½	124·125	30·375	154·500	40·500	93·750	20·250	48·187	5·062	40½
41	126·796	31·129	157·926	41·506	95·667	20·753	48·972	5·188	41
41½	129·495	31·894	161·389	42·525	97·602	21·263	49·762	5·316	41½
42	132·222	32·667	164·889	43·556	99·556	21·778	50·556	5·444	42
42½	134·976	33·449	168·426	44·599	101·528	22·299	51·354	5·575	42½
43	137·758	34·241	172·000	45·654	103·519	22·827	52·157	5·707	43
43½	140·569	35·042	175·611	46·722	105·528	23·361	52·965	5·840	43½
44	143·407	35·852	179·259	47·802	107·556	23·901	53·778	5·975	44
44½	146·273	36·671	182·944	48·895	109·602	24·447	54·595	6·112	44½
45	149·167	37·500	186·667	50·000	111·667	25·000	55·417	6·250	45
45½	152·086	38·338	190·426	51·117	113·750	25·559	56·243	6 390	45½
46	155·037	39·185	194·222	52·247	115·852	26·123	57·074	6·531	46
46½	158·014	40·042	198·056	53·389	117·972	26·694	57·910	6·673	46½
47	161·018	40·907	201·926	54·543	120·111	27·272	58·750	6·818	47
47½	164·049	41·782	205·833	55·709	122·269	27·855	59·595	6·964	47½
48	167·111	42·667	209·778	56·889	124·444	28·444	60·444	7·111	48
48½	170·197	43·560	213·759	58·080	126·639	29·040	61·299	7·260	48½
49	173·314	44·463	217·778	59·284	128·852	29·642	62·157	7·410	49
49½	176·458	45·375	221·833	60·500	131·083	30·250	63·021	7·562	49½
50	179·630	46·296	225·926	61·728	133·333	30·864	63·889	7·716	50
50½	182·829	47·227	230·056	62·970	135·602	31·485	64·762	7·871	50½
51	186·056	48·167	234·222	64·222	137·889	32·111	65·639	8·028	51
51½	189·310	49·116	238·426	65·488	140·194	32·744	66·521	8·186	51½
52	192·593	50·074	242·667	66·765	142·519	33·383	67·407	8·346	52
52½	195·902	51·042	246·944	68·056	144·861	34·028	68·299	8·507	52½
53	199·240	52·018	251·259	69·357	147·222	34·679	69·194	8·670	53
53½	202·606	53·004	255·611	70·672	149·602	35·336	70·095	8·834	53½
54	206·000	54·000	260·000	72·000	152·000	36·000	71·000	9·000	54
54½	209·421	55·004	264·426	73·339	154·417	36·670	71·910	9·167	54½
55	212·870	56·018	268·889	74·691	156·852	37·346	72·824	9·336	55
55½	216·347	57·042	273·389	76·056	159·306	38·028	73·743	9·507	55½
56	219·852	58·074	277·926	77·432	161·778	38·716	74·667	9·679	56
56½	223·385	59·116	282·500	78·821	164·269	39·411	75·595	9·853	56½
57	226·944	60·167	287·111	80·222	166·778	40·111	76·528	10·028	57
57½	230·533	61·227	291·759	81·636	169·306	40·818	77·465	10·204	57½
58	234·148	62·296	296·444	83·061	171·852	41·531	78·407	10·383	58
58½	237·792	63·375	301·167	84·500	174·417	42·250	79·354	10·563	58½
59	241·463	64·463	305·926	85·951	177·000	42·975	80·306	10·744	59
59½	245·162	65·560	310·722	87·413	179·602	43·707	81·262	10·927	59½
60	248·889	66·667	315·556	88·889	182·222	44·444	82·222	11·111	60

TABLE XVIII.—Base 23 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·439	·004	·444	·005	·435	·003	·428	·001	½
1	·907	·018	·926	·024	·889	·012	·861	·003	1
1½	1·403	·042	1·444	·056	1·362	·028	1·299	·007	1½
2	1·926	·074	2·000	·099	1·852	·049	1·741	·012	2
2½	2·478	·116	2·593	·155	2·362	·077	2·187	·019	2½
3	3·056	·167	3·222	·222	2·889	·111	2·639	·028	3
3½	3·662	·227	3 889	·303	3·435	·151	3·095	·039	3½
4	4·296	·296	4·593	·395	4·000	·197	3·556	·049	4
4½	4·958	·375	5·333	·500	4·583	·250	4·021	·062	4½
5	5·648	·463	6·111	·617	5·185	·309	4·491	·077	5
5½	6·366	·560	6·926	·747	5·806	·374	4·965	·093	5½
6	7·111	·667	7·778	·889	6·444	·444	5·444	·111	6
6½	7·884	·782	8·667	1·044	7·102	·522	5·928	·130	6½
7	8·685	·907	9·593	1·209	7·778	·605	6·417	·151	7
7½	9·513	1·042	10·556	1·389	8·472	·695	6·910	·174	7½
8	10·370	1·185	11·556	1·580	9·185	·790	7·407	·197	8
8½	11·255	1·338	12·593	1·784	9·917	·892	7·910	·223	8½
9	12·167	1·500	13·667	2·000	10·667	1·000	8·417	·250	9
9½	13·106	1·672	14·778	2·229	11·435	1·115	8·928	·279	9½
10	14·074	1·852	15·926	2·470	12·222	1·235	9·444	·309	10
10½	15·069	2·042	17·111	2·723	13·028	1·361	9·965	·340	10½
11	16·092	2·241	18·333	2·988	13·852	1·494	10·491	·373	11
11½	17·144	2·449	19·593	3·265	14·695	1·633	11·021	·408	11½
12	18·222	2·667	20·889	3·556	15·556	1·778	11·556	·444	12
12½	19·329	2·894	22·222	3·859	16·435	1·929	12·095	·482	12½
13	20·462	3·129	23·593	4·173	17·333	2·086	12·639	·521	13
13½	21·625	3·375	25·000	4·500	18·250	2·250	13·187	·562	13½
14	22·814	3·630	26·444	4·839	19·185	2·419	13·741	·605	14
14½	24·033	3·894	27·926	5·191	20·139	2·596	14·299	·649	14½
15	25·278	4·167	29·444	5·556	21·111	2·778	14·861	·694	15
15½	26·551	4·449	31·000	5·933	22·102	2·966	15·428	·741	15½
16	27·851	4·741	32·593	6·321	23·111	3·161	16·000	·790	16
16½	29·180	5·042	34·222	6·723	24·139	3·361	16·576	·840	16½
17	30·537	5·352	35·889	7·136	25·185	3·568	17·157	·892	17
17½	31·921	5·671	37·593	7·562	26·250	3·781	17·743	·945	17½
18	33·333	6·000	39·333	8·000	27·333	4·000	18·333	1·000	18
18½	34·773	6·338	41·111	8·451	28·435	4·225	18·928	1·056	18½
19	36·241	6·685	42·926	8·913	29·556	4·457	19·528	1·114	19
19½	37·736	7·042	44·778	9·389	30·695	4·695	20·132	1·174	19½
20	39·259	7·407	46·667	9·877	31·852	4·939	20·741	1·235	20
20½	40·810	7·782	48·593	10·377	33·028	5·188	21·354	1·297	20½
21	42·389	8·167	50·556	10·889	34·222	5·444	21·972	1·361	21
21½	43 995	8·560	52·556	11·413	35·435	5·707	22·595	1·427	21½
22	45·630	8·963	54·593	11·951	36·667	5·975	23·222	1·494	22
22½	47·292	9·375	56·667	12·500	37·917	6·250	23·854	1·562	22½
23	48·981	9·796	58·778	13·061	39·185	6·531	24·491	1·633	23
23½	50·699	10·227	60·926	13·636	40·472	6·818	25·132	1·705	23½
24	52·444	10·667	63·111	14·222	41·778	7·111	25·778	1·778	24
24½	54·218	11·116	65·333	14·821	43·102	7·411	26·428	1·853	24½
25	56·018	11·574	67·593	15·432	44·444	7·716	27·083	1·929	25
25½	57·847	12·042	69·889	16·056	45·806	8·028	27·743	2·007	25½
26	59·703	12·518	72·222	16·691	47·185	8·347	28·407	2·086	26
26½	61·587	13·004	74·593	17·339	48·583	8·670	29·076	2·167	26½
27	63·500	13·500	77·000	18·000	50·000	9·000	29·750	2·250	27
27½	65·439	14·004	79·444	18·672	51·435	9·336	30·428	2·334	27½
28	67·407	14·518	81·926	19·357	52·889	9·679	31·111	2·420	28
28½	69·403	15·042	84·444	20·056	54·362	10·028	31·799	2·507	28½
29	71·426	15·574	87·000	20·765	55·852	10·383	32·491	2·596	29
29½	73·478	16·116	89·593	21·488	57·362	10·744	33·187	2·686	29½
30	75·556	16·667	92·222	22·222	58·889	11·111	33·889	2·778	30

TABLE XVIII.—Base 23 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
30½	77·662	17·227	94·889	22·970	60·435	11·485	34·595	2·871	30½
31	79·796	17·796	97·593	23·728	62·000	11·864	35·306	2·966	31
31½	81·958	18·375	100·333	24·500	63·583	12·250	36·021	3·062	31½
32	84·148	18·963	103·111	25·284	65·185	12·642	36·741	3·160	32
32½	86·366	19·560	105·926	26·080	66·806	13·040	37·465	3·260	32½
33	88·611	20·167	108·778	26·889	68·444	13·444	38·194	3·361	33
33½	90·884	20·782	111·667	27·709	70·102	13 855	38·928	3·464	33½
34	93·185	21·407	114·593	28·543	71·778	14·272	39·667	3·568	34
34½	95·513	22·042	117·556	29·389	73·472	14·694	40·410	3·674	34½
35	97·870	22·685	120·556	30·247	75·185	15·123	41·157	3·781	35
35½	100·255	23·338	123·593	31·117	76·917	15·559	41·910	3·890	35½
36	102·667	24·000	126·667	32·000	78·667	16·000	42·667	4·000	36
36½	105·106	24·671	129·778	32·895	80·435	16·447	43·428	4·112	36½
37	107·574	25·352	132·926	33·802	82·222	16·901	44·194	4·225	37
37½	110·069	26·042	136·111	34·722	84·028	17·361	44·965	4·340	37½
38	112·592	26·741	139·333	35·654	85·852	17·827	45·741	4·457	38
38½	115·144	27·449	142·593	36·599	87·695	18·299	46·521	4·575	38½
39	117·722	28·167	145·889	37·556	89·556	18·778	47·306	4·694	39
39½	120·329	28·894	149·222	38·525	91·435	19·263	48·095	4·816	39½
40	122·962	29·630	152·593	39·506	93·333	19·753	48·889	4·933	40
40½	125·625	30·375	156·000	40·500	95·250	20·250	49·687	5·062	40½
41	128·314	31·129	159·444	41·506	97·185	20·753	50·491	5·188	41
41½	131·033	31·894	162·926	42·525	99·139	21·263	51·299	5·316	41½
42	133·778	32·667	166·444	43·556	101·111	21·778	52·111	5·444	42
42½	136·551	33·449	170·000	44·599	103·102	22·299	52·928	5·575	42½
43	139·351	34·241	173·593	45·654	105·111	22·827	53·750	5·707	43
43½	142·180	35·042	177·222	46·722	107·139	23·361	54·576	5·840	43½
44	145·037	35·852	180·889	47·802	109·185	23·901	55·407	5·975	44
44½	147·921	36·671	184·593	48·895	111·250	24·447	56·243	6·112	44½
45	150·833	37·500	188·333	50·000	113·333	25·000	57·083	6·250	45
45½	153·773	38·338	192·111	51·117	115·435	25·559	57·928	6·390	45½
46	156·741	39·185	195·926	52·247	117·556	26·123	58·778	6·531	46
46½	159·736	40·042	199·778	53·389	119·695	26·694	59·632	6·673	46½
47	162·759	40·907	203·667	54·543	121·852	27·272	60·491	6·818	47
47½	165·810	41·782	207·593	55·709	124·028	27·855	61·354	6·964	47½
48	168·889	42·667	211·556	56·889	126·222	28·444	62·222	7·111	48
48½	171·995	43·560	215·556	58·080	128·435	29·040	63·095	7·260	48½
49	175·130	44·463	219·593	59·284	130·667	29·642	63·972	7·410	49
49½	178·292	45·375	223·667	60·500	132·917	30·250	64·854	7·562	49½
50	181·481	46·296	227·778	61·728	135·185	30·864	65·741	7·716	50
50½	184·699	47·227	231·926	62·970	137·472	31·485	66·632	7·871	50½
51	187·944	48·167	236·111	64·222	139·778	32·111	67·528	8·028	51
51½	191·218	49·116	240·333	65·488	142·102	32·744	68·428	8·186	51½
52	194·518	50·074	244·593	66·765	144·444	33·383	69·333	8·346	52
52½	197·847	51·042	248·889	68·056	146·806	34·028	70·243	8·507	52½
53	201·203	52·018	253·222	69·357	149·185	34·679	71·157	8 670	53
53½	204·587	53·004	257·593	70·672	151·583	35·336	72·076	8·834	53½
54	208·000	54·000	262·000	72·000	154·000	36·000	73·000	9·000	54
54½	211·439	55·004	266·444	73·339	156·435	36·670	73·928	9·167	54½
55	214·907	56·018	270·926	74·691	158·889	37·346	74·861	9·336	55
55½	218·403	57·042	275·444	76·056	161·362	38·028	75·799	9·507	55½
56	221·926	58·074	280·000	77·432	163·852	38·716	76·741	9·679	56
56½	225·478	59·116	284·593	78·821	166·362	39·411	77·687	9·853	56½
57	229·056	60·167	289·222	80·222	168·889	40·111	78·639	10·028	57
57½	232·662	61·227	293·889	81·636	171·435	40·818	79·595	10·204	57½
58	236·296	62·296	298·593	83·061	174·000	41·531	80·556	10·383	58
58½	239·958	63·375	303·333	84·500	176·583	42·250	81·521	10·563	58½
59	243·648	64·463	308·111	85·951	179·185	42·975	82·491	10·744	59
59½	247·366	65·560	312·926	87·413	181·806	43·707	83 465	10·927	59½
60	251·111	66·667	317·778	88·889	184·444	44·444	84·444	11·111	60

TABLE XIX.—Base 24 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·458	·004	·463	·005	·454	·003	·447	·001	½
1	·944	·018	·963	·024	·926	·012	·898	·003	1
1½	1·458	·042	1·500	·056	1·417	·028	1·354	·007	1½
2	2·000	·074	2·074	·099	1·926	·049	1·815	·012	2
2½	2·570	·116	2·685	·155	2·454	·077	2·280	·019	2½
3	3·167	·167	3·333	·222	3·000	·111	2·750	·028	3
3½	3·792	·227	4·019	·303	3·565	·151	3·225	·039	3½
4	4·444	·296	4·741	·395	4·148	·197	3·704	·049	4
4½	5·125	·375	5·500	·500	4·750	·250	4·187	·062	4½
5	5·833	·463	6·296	·617	5·370	·309	4·676	·077	5
5½	6·570	·560	7·130	·747	6·009	·374	5·169	·093	5½
6	7·333	·667	8·000	·889	6·667	·444	5·667	·111	6
6½	8·125	·782	8·908	1·044	7·343	·522	6·169	·130	6½
7	8·944	·907	9·852	1·209	8·037	·605	6·676	·151	7
7½	9·792	1·042	10·833	1·389	8·750	·695	7·187	·174	7½
8	10·667	1·185	11·852	1·580	9·481	·790	7·704	·197	8
8½	11·570	1·338	12·908	1·784	10·232	·892	8·225	·223	8½
9	12·500	1·500	14·000	2·000	11·000	1·000	8·750	·250	9
9½	13·458	1·672	15·130	2·229	11·787	1·115	9·280	·279	9½
10	14·444	1·852	16·296	2·470	12·593	1·235	9·815	·309	10
10½	15·458	2·042	17·500	2·723	13·417	1·361	10·354	·340	10½
11	16·500	2·241	18·741	2·988	14·259	1·494	10·898	·373	11
11½	17·570	2·449	20·019	3·265	15·120	1·633	11·447	·408	11½
12	18·667	2·667	21·333	3·556	16·000	1·778	12·000	·444	12
12½	19·792	2·894	22·685	3·859	16·898	1·929	12·558	·482	12½
13	20·944	3·129	24·074	4·173	17·815	2·086	13·120	·521	13
13½	22·125	3·375	25·500	4·500	18·750	2·250	13·687	·562	13½
14	23·333	3·630	26·963	4·839	19·704	2·419	14·259	·605	14
14½	24·570	3·894	28·463	5·191	20·676	2·596	14·836	·649	14½
15	25·833	4·167	30·000	5·556	21·667	2·778	15·417	·694	15
15½	27·125	4·449	31·574	5·933	22·676	2·966	16·002	·741	15½
16	28·444	4·741	33·185	6·321	23·704	3·161	16·593	·790	16
16½	29·792	5·042	34·833	6·723	24·750	3·361	17·187	·840	16½
17	31·167	5·352	36·519	7·136	25·815	3·568	17·787	·892	17
17½	32·570	5·671	38·241	7·562	26·898	3·781	18·391	·945	17½
18	34·000	6·000	40·000	8·000	28·000	4·000	19·000	1·000	18
18½	35·458	6·338	41·796	8·451	29·120	4·225	19·613	1·056	18½
19	36·944	6·685	43·630	8·913	30·259	4·457	20·231	1·114	19
19½	38·458	7·042	45·500	9·389	31·417	4·695	20·854	1·174	19½
20	40·000	7·407	47·408	9·877	32·593	4·939	21·481	1·235	20
20½	41·570	7·782	49·352	10·377	33·787	5·188	22·113	1·297	20½
21	43·167	8·167	51·333	10·889	35·000	5·444	22·750	1·361	21
21½	44·792	8·560	53·352	11·413	36·232	5·707	23·391	1·427	21½
22	46·444	8·963	55·408	11·951	37·481	5·975	24·037	1·494	22
22½	48·125	9·375	57·500	12·500	38·750	6·250	24·687	1·562	22½
23	49·833	9·796	59·630	13·061	40·037	6·531	25·343	1·633	23
23½	51·570	10·227	61·796	13·636	41·343	6·818	26·002	1·705	23½
24	53·333	10·667	64·000	14·222	42·667	7·111	26·667	1·778	24
24½	55·125	11·116	66·241	14·821	44·009	7·411	27·336	1·853	24½
25	56·944	11·574	68·519	15·432	45·370	7·716	28·009	1·929	25
25½	58·792	12·042	70·833	16·056	46·750	8·028	28·687	2·007	25½
26	60·667	12·518	73·185	16·691	48·148	8·347	29·370	2·086	26
26½	62·570	13·004	75·574	17·339	49·565	8·670	30·058	2·167	26½
27	64·500	13·500	78·000	18·000	51·000	9·000	30·750	2·250	27
27½	66·458	14·004	80·463	18·672	52·454	9·336	31·447	2·334	27½
28	68·444	14·518	82·963	19·357	53·926	9·679	32·148	2·420	28
28½	70·458	15·042	85·500	20·056	55·417	10·028	32·854	2·507	28½
29	72·500	15·574	88·074	20·765	56·926	10·383	33·565	2·596	29
29½	74·570	16·116	90·685	21·488	58·454	10·744	34·280	2·686	29½
30	76·667	16·667	93·333	22·222	60·000	11·111	35·000	2·778	30

TABLE XXIII.—Base 28 Feet.

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	82·208	16·946	99·153	22·594	¼	160·680	37·918	198·597	50·557
½	83·311	17·227	100·537	22·970	½	162·199	38·338	200·537	51·117
¾	84·420	17·510	101·931	23·347	¾	163·725	38·760	202·486	51·681
31	85·537	17·796	103·333	23·728	46	165·259	39·185	204·444	52·247
¼	86·660	18·084	104·745	24·113	¼	166·799	39·612	206·412	52·816
½	87·792	18·375	106·167	24·500	½	168·347	40·042	208·389	53·389
¾	88·930	18·668	107·597	24·890	¾	169·901	40·473	210·375	53·965
32	90·074	18·963	109·037	25·284	47	171·463	40·907	212·370	54·543
¼	91·225	19·260	110·486	25·681	¼	173·031	41·344	214·375	55·125
½	92·384	19·560	111·944	26·080	½	174·607	41·782	216·389	55·709
¾	93·549	19·862	113·412	26·483	¾	176·188	42·223	218·412	56·298
33	94·722	20·167	114·889	26·889	48	177·778	42·667	220·444	56·889
¼	95·901	20·473	116·375	27·298	¼	179·374	43·112	222·486	57·483
½	97·088	20·782	117·870	27·709	½	180·977	43·560	224·537	58·080
¾	98·281	21·094	119·375	28·125	¾	182·586	44·010	226·597	58·681
34	99·482	21·407	120·889	28·543	49	184·204	44·463	228·667	59·284
¼	100·688	21·723	122·412	28·965	¼	185·828	44·918	230·745	59·890
½	101·903	22·042	123·944	29·389	½	187·458	45·375	232·833	60·500
¾	103·124	22·362	125·486	29·816	¾	189·096	45·834	234·931	61·113
35	104·352	22·685	127·037	30·247	50	190·741	46·296	237·037	61·728
¼	105·586	23·010	128·597	30·681	¼	192·392	46·760	239·153	62·347
½	106·829	23·338	130·167	31·117	½	194·051	47·227	241·278	62·970
¾	108·078	23·668	131·745	31·557	¾	195·717	47·696	243·412	63·594
36	109·333	24·000	133·333	32·000	51	197·389	48·167	245·556	64·222
¼	110·596	24·334	134·931	32·446	¼	199·068	48·640	247·708	64·853
½	111·866	24·671	136·537	32·895	½	200·754	49·116	249·870	65·488
¾	113·142	25·010	138·153	33·347	¾	202·448	49·594	252·042	66·125
37	114·426	25·352	139·778	33·802	52	204·148	50·074	254·222	66·765
¼	115·717	25·696	141·412	34·261	¼	205·856	50·557	256·412	67·409
½	117·014	26·042	143·056	34·722	½	207·569	51·042	258·611	68·056
¾	118·318	26·390	144·708	35·187	¾	209·291	51·529	260·819	68·705
38	119·630	26·741	146·370	35·654	53	211·018	52·018	263·037	69·357
¼	120·948	27·094	148·042	36·125	¼	212·753	52·510	265·264	70·014
½	122·273	27·449	149·722	36·599	½	214·495	53·004	267·500	70·672
¾	123·606	27·807	151·412	37·076	¾	216·244	53·501	269·745	71·335
39	124·944	28·167	153·111	37·556	54	218·000	54·000	272·000	72·000
¼	126·291	28·529	154·819	38·039	¼	219·763	54·501	274·264	72·668
½	127·643	28·894	156·537	38·525	½	221·532	55·004	276·537	73·339
¾	129·003	29·260	158·264	39·014	¾	223·309	55·510	278·819	74·014
40	130·370	29·630	160·000	39·506	55	225·092	56·018	281·111	74·691
¼	131·744	30·001	161·745	40·002	¼	226·883	56·529	283·412	75·372
½	133·125	30·375	163·500	40·500	½	228·681	57·042	285·722	76·056
¾	134·513	30·751	165·264	41·002	¾	230·485	57·557	288·042	76·742
41	135·907	31·129	167·037	41·506	56	232·296	58·074	290·370	77·432
¼	137·309	31·510	168·819	42·014	¼	234·115	58·594	292·708	78·125
½	138·718	31·894	170·611	42·525	½	235·940	59·116	295·056	78·821
¾	140·133	32·279	172·412	43·039	¾	237·772	59·640	297·412	79·520
42	141·556	32·667	174·222	43·556	57	239·611	60·167	299·778	80·222
¼	142·985	33·057	176·042	44·076	¼	241·458	60·696	302·153	80·928
½	144·421	33·449	177·870	44·599	½	243·311	61·227	304·537	81·636
¾	145·865	33·844	179·708	45·125	¾	245·170	61·760	306·931	82·347
43	147·315	34·241	181·556	45·654	58	247·037	62·296	309·333	83·061
¼	148·772	34·640	183·412	46·187	¼	248·910	62·834	311·745	83·779
½	150·236	35·042	185·278	46·722	½	250·792	63·375	314·167	84·500
¾	151·708	35·446	187·153	47·261	¾	252·680	63·918	316·597	85·224
44	153·185	35 852	189·037	47·802	59	254·574	64·463	319·037	85·951
¼	154·670	36·260	190·931	48·347	¼	256·475	65·010	321·486	86·681
½	156·162	36·671	192·833	48·895	½	258·384	65·560	323·944	87·413
¾	157·661	37·085	194·745	49·446	¾	260·299	66·112	326·412	88·150
45	159·167	37·500	196·667	50·000	60	262·222	66·667	328·889	88·889

TABLE XX.—Base 25 Feet.

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	·235	·001	·236	·002	¼	27·041	4·307	31·347	5·742
½	·477	·004	·481	·005	½	27·699	4·449	32·148	5·933
¾	·725	·010	·736	·014	¾	28·365	4·594	32·958	6·125
1	·981	·018	1·000	·024	16	29·037	4·741	33·778	6·321
¼	1·244	·029	1·273	·039	¼	29·716	4·890	34·606	6·520
½	1·514	·042	1·556	·056	½	30·402	5·042	35·444	6·723
¾	1·791	·057	1·847	·076	¾	31·096	5·196	36·292	6·928
2	2·074	·074	2·148	·099	17	31·796	5·352	37·148	7·136
¼	2·365	·094	2·458	·125	¼	32·503	5·510	38·014	7·347
½	2·662	·116	2·778	·155	½	33·217	5·671	38·889	7·562
¾	2·966	·140	3·106	·187	¾	33·939	5·835	39·773	7·779
3	3·278	·167	3·444	·222	18	34·667	6·000	40·667	8·000
¼	3·596	·196	3·792	·261	¼	35·402	6·168	41·569	8·224
½	3·921	·227	4·148	·303	½	36·143	6·338	42·481	8·451
¾	4·253	·260	4·514	·347	¾	36·892	6·510	43·403	8·681
4	4·592	·296	4·889	·395	19	37·648	6·685	44·333	8·913
¼	4·938	·334	5·273	·446	¼	38·411	6·862	45·273	9·150
½	5·292	·375	5·667	·500	½	39·180	7·042	46·222	9·389
¾	5·652	·418	6·069	·557	¾	39·957	7·223	47·181	9·631
5	6·018	·463	6·481	·617	20	40·740	7·407	48·148	9·877
¼	6·392	·510	6·903	·681	¼	41·531	7·594	49·125	10·125
½	6·772	·560	7·333	·747	½	42·328	7·782	50·111	10·377
¾	7·161	·612	7·773	·816	¾	43·133	7·973	51·106	10·631
6	7·556	·667	8·222	·889	21	43·944	8·167	52·111	10·889
¼	7·957	·723	8·681	·965	¼	44·762	8·362	53·125	11·150
½	8·365	·782	9·148	1·044	½	45·588	8·560	54·148	11·413
¾	8·781	·844	9·625	1·125	¾	46·420	8·760	55·181	11·681
7	9·203	·907	10·111	1·209	22	47·259	8·963	56·222	11·951
¼	9·633	·973	10·606	1·298	¼	48·105	9·168	57·273	12·224
½	10·068	1·042	11·111	1·389	½	48·958	9·375	58·333	12·500
¾	10·512	1·112	11·625	1·483	¾	49·819	9·585	59·403	12·779
8	10·962	1·185	12·148	1·580	23	50·685	9·796	60·481	13·061
¼	11·420	1·260	12·681	1·681	¼	51·559	10·010	61·569	13·347
½	11·884	1·338	13·222	1·784	½	52·440	10·227	62·667	13·636
¾	12·355	1·418	13·773	1·890	¾	53·328	10·446	63·773	13·928
9	12·833	1·500	14·333	2·000	24	54·222	10·667	64·889	14·222
¼	13·318	1·584	14·903	2·113	¼	55·124	10·890	66·014	14·520
½	13·809	1·672	15·481	2·229	½	56·034	11·116	67·148	14·821
¾	14·309	1·760	16·069	2·347	¾	56·948	11·344	68·292	15·125
10	14·815	1·852	16·667	2·470	25	57·871	11·574	69·444	15·432
¼	15·328	1·946	17·273	2·594	¼	58·800	11·807	70·606	15·742
½	15·847	2·042	17·889	2·723	½	59·737	12·042	71·778	16·056
¾	16·374	2·140	18·514	2·853	¾	60·679	12·279	72·958	16·372
11	16·907	2·241	19·148	2·988	26	61·630	12·518	74·148	16·691
¼	17·448	2·344	19·792	3·125	¼	62·586	12·760	75·347	17·014
½	17·994	2·449	20·444	3·265	½	63·552	13·004	76·556	17·339
¾	18·550	2·557	21·106	3·409	¾	64·522	13·251	77·773	17·668
12	19·111	2·667	21·778	3·556	27	65·500	13·500	79·000	18·000
¼	19·679	2·779	22·458	3·705	¼	66·485	13·751	80·236	18·335
½	20·254	2·894	23·148	3·859	½	67·477	14·004	81·481	18·672
¾	20·836	3·010	23·847	4·014	¾	68·475	14·260	82·736	19·014
13	21·425	3·129	24·556	4·173	28	69·481	14·518	84·000	19·357
¼	22·022	3·251	25·273	4·335	¼	70·494	14·779	85·273	19·705
½	22·625	3·375	26·000	4·500	½	71·514	15·042	86·556	20·056
¾	23·235	3·501	26·736	4·668	¾	72·541	15·307	87·847	20·409
14	23·850	3·630	27·481	4·839	29	73·574	15·574	89·148	20·765
¼	24·475	3·760	28·236	5·014	¼	74·615	15·844	90·458	21·125
½	25·106	3·894	29·000	5·191	½	75·662	16·116	91·778	21·488
¾	25·744	4·029	29·773	5·372	¾	76·716	16·390	93·106	21·853
15	26·389	4·167	30·556	5·556	30	77·778	16·667	94·444	22·222

TABLE XX.—Base 25 Feet.

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	78·846	16·946	95·792	22·594		155·652	37·918	193·569	50·557
	79·921	17·227	97·148	22·970		157·143	38·338	195·481	51·117
	81·003	17·510	98·514	23·347		158·642	38·760	197·403	51·681
31	82·092	17·796	99·889	23·728	46	160·148	39·185	199·333	52·247
	83·188	18·084	101·273	24·113		161·661	39·612	201·273	52·816
	84·292	18·375	102·667	24·500		163·180	40·042	203·222	53·389
	85·402	18·668	104·069	24·890		164·707	40·473	205·181	53·965
32	86·518	18·963	105·481	25·284	47	166·240	40·907	207·148	54·543
	87·642	19·260	106·903	25·681		167·781	41·344	209·125	55·125
	88·772	19·560	108·333	26·080		169·328	41·782	211·111	55·709
	89·911	19·862	109·773	26·483		170·883	42·223	213·106	56·298
33	91·056	20·167	111·222	26·889	48	172·444	42·667	215·111	56·889
	92·207	20·473	112·681	27·298		174·012	43·112	217·125	57·483
	93·365	20·782	114·148	27·709		175·588	43·560	219·148	58·080
	94·531	21·094	115·625	28·125		177·170	44·010	221·181	58·681
34	95·703	21·407	117·111	28·543	49	178·759	44·463	223·222	59·284
	96·883	21·723	118·606	28·965		180·355	44·918	225·273	59·890
	98·068	22·042	120·111	29·389		181·958	45·375	227·333	60·500
	99·262	22·362	121·625	29·816		183·568	45·834	229·403	61·113
35	100·462	22·685	123·148	30·247	50	185·185	46·296	231·481	61·728
	101·670	23·010	124·681	30·681		186·809	46·760	233·569	62·347
	102·884	23·338	126·222	31·117		188·440	47·227	235·667	62·970
	104·105	23·668	127·773	31·557		190·078	47·696	237·773	63·594
36	105·333	24·000	129·333	32·000	51	191·722	48·167	239·889	64·222
	106·568	24·334	130·903	32·446		193·374	48·640	242·014	64·853
	107·809	24·671	132·481	32·895		195·034	49·116	244·148	65·488
	109·059	25·010	134·069	33·347		196·698	49·594	246·292	66·125
37	110·315	25·352	135·667	33·802	52	198·371	50·074	248·444	66·765
	111·578	25·696	137·273	34·261		200·050	50·557	250·606	67·409
	112·847	26·042	138·889	34·722		201·737	51·042	252·778	68·056
	114·124	26·390	140·514	35·187		203·429	51·529	254·958	68·705
38	115·407	26·741	142·148	35·654	53	205·130	52·018	257·148	69·357
	116·698	27·094	143·792	36·125		206·836	52·510	259·347	70·014
	117·994	27·449	145·444	36·599		208·552	53·004	261·556	70·672
	119·300	27·807	147·106	37·076		210·272	53·501	263·773	71·335
39	120·611	28·167	148·778	37·556	54	212·000	54·000	266·000	72·000
	121·929	28·529	150·458	38·039		213·735	54·501	268·236	72·668
	123·254	28·894	152·148	38·525		215·477	55·004	270·481	73·339
	124·586	29·260	153·847	39·014		217·225	55·510	272·736	74·014
40	125·925	29·630	155·556	39·506	55	218·981	56·018	275·000	74·691
	127·272	30·001	157·273	40·002		220·744	56·529	277·273	75·372
	128·625	30·375	159·000	40·500		222·514	57·042	279·556	76·056
	129·985	30·751	160·736	41·002		224·291	57·557	281·847	76·742
41	131·350	31·129	162·481	41·506	56	226·074	58·074	284·148	77·432
	132·725	31·510	164·236	42·014		227·865	58·594	286·458	78·125
	134·106	31·894	166·000	42·525		229·662	59·116	288·778	78·821
	135·494	32·279	167·773	43·039		231·466	59·640	291·106	79·520
42	136·889	32·667	169·556	43·556	57	233·278	60·167	293·444	80·222
	138·291	33·057	171·347	44·076		235·096	60·696	295·792	80·928
	139·699	33·449	173·148	44·599		236·921	61·227	298·148	81·636
	141·115	33·844	174·958	45·125		238·753	61·760	300·514	82·347
43	142·537	34·241	176·778	45·654	58	240·592	62·296	302·889	83·061
	143·966	34·640	178·606	46·187		242·438	62·834	305·273	83·779
	145·402	35·042	180·444	46·722		244·292	63·375	307·667	84·500
	146·846	35·446	182·292	47·261		246·152	63·918	310·069	85·224
44	148·296	35·852	184·148	47·802	59	248·018	64·463	312·481	85·951
	149·753	36·260	186·014	48·347		249·892	65·010	314·903	86·681
	151·217	36·671	187·889	48·895		251·772	65·560	317·333	87·413
	152·689	37·085	189·773	49·446		253·661	66·112	319·773	88·150
45	154·167	37·500	191·667	50·000	60	255·556	66·667	322·222	88·889

TABLE XX.—Base 25 Feet—*continued.*

Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	·234	·001	·232	·000
½	·472	·003	·465	·001
¾	·715	·007	·700	·002
1	·963	·012	·935	·003
¼	1·215	·019	1·172	·005
½	1·472	·028	1·410	·007
¾	1·734	·038	1·649	·009
2	2·000	·049	1·889	·012
¼	2·271	·062	2·130	·016
½	2·546	·077	2·373	·019
¾	2·826	·093	2·616	·023
3	3·111	·111	2·861	·028
¼	3·400	·130	3·107	·033
½	3·694	·151	3·354	·039
¾	3·993	·174	3·602	·043
4	4·296	·197	3·852	·049
¼	4·604	·223	4·102	·056
½	4·917	·250	4·354	·062
¾	5·234	·279	4·607	·070
5	5·556	·309	4·861	·077
¼	5·882	·340	5·116	·085
½	6·213	·374	5·373	·093
¾	6·549	·408	5·630	·102
6	6·889	·444	5·889	·111
¼	7·234	·482	6·149	·121
½	7·583	·522	6·410	·130
¾	7·937	·562	6·672	·141
7	8·296	·605	6·935	·151
¼	8·660	·649	7·200	·162
½	9·027	·695	7·465	·174
¾	9·400	·742	7·732	·185
8	9·778	·790	8·000	·197
¼	10·160	·840	8·269	·210
½	10·546	·892	8·539	·223
¾	10·937	·945	8·811	·236
9	11·333	1·000	9·083	·250
¼	11·734	1·056	9·357	·264
½	12·139	1·115	9·632	·279
¾	12·549	1·174	9·908	·293
10	12·963	1·235	10·185	·309
¼	13·382	1·297	10·464	·324
½	13·805	1·361	10·743	·340
¾	14·234	1·427	11·024	·357
11	14·667	1·494	11·306	·373
¼	15·104	1·562	11·589	·391
½	15·546	1·633	11·872	·408
¾	15·993	1·704	12·158	·426
12	16·444	1·778	12·444	·444
¼	16·900	1·853	12·732	·463
½	17·360	1·929	13·021	·482
¾	17·826	2·007	13·311	·502
13	18·296	2·086	13·602	·521
¼	18·771	2·167	13·894	·542
½	19·250	2·250	14·188	·562
¾	19·734	2·334	14·482	·584
14	20·222	2·419	14·778	·605
¼	20·715	2·507	15·075	·627
½	21·212	2·596	15·372	·649
¾	21·715	2·686	15·672	·671
15	22·222	2·778	15·972	·694

Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	22·734	2·871	16·274	·718
½	23·250	2·966	16·575	·741
¾	23·771	3·063	16·880	·766
16	24·296	3·161	17·185	·790
¼	24·826	3·260	17·491	·815
½	25·360	3·361	17·797	·840
¾	25·900	3·464	18·107	·866
17	26·444	3·568	18·416	·892
¼	26·993	3·674	18·727	·918
½	27·546	3·781	19·038	·945
¾	28·104	3·890	19·352	·972
18	28·667	4·000	19·667	1·000
¼	29·234	4·112	19·982	1·028
½	29·805	4·225	20·299	1·056
¾	30·382	4·340	20·616	1·085
19	30·963	4·457	20·935	1·114
¼	31·549	4·575	21·255	1·144
½	32·139	4·695	21·575	1·174
¾	32·734	4·816	21·899	1·204
20	33·333	4·939	22·222	1·235
¼	33·937	5·063	22·547	1·266
½	34·546	5·188	22·873	1·297
¾	35·160	5·316	23·200	1·329
21	35·778	5·444	23·528	1·361
¼	36·400	5·575	23·857	1·394
½	37·027	5·707	24·187	1·427
¾	37·660	5·840	24·519	1·460
22	38·296	5·975	24·852	1·494
¼	38·937	6·112	25·186	1·528
½	39·583	6·250	25·521	1·562
¾	40·234	6·390	25·857	1·597
23	40·889	6·531	26·194	1·633
¼	41·549	6·674	26·533	1·668
½	42·213	6·818	26·872	1·705
¾	42·882	6·964	27·213	1·741
24	43·556	7·111	27·556	1·778
¼	44·234	7·260	27·899	1·815
½	44·917	7·411	28·245	1·853
¾	45·604	7·563	28·588	1·891
25	46·296	7·716	28·936	1·929
¼	46·993	7·871	29·283	1·968
½	47·694	8·028	29·632	2·007
¾	48·400	8·186	29·982	2·046
26	49·111	8·347	30·333	2·086
¼	49·826	8·507	30·686	2·127
½	50·546	8·670	31·038	2·167
¾	51·271	8·834	31·394	2·209
27	52·000	9·000	31·750	2·250
¼	52·734	9·167	32·107	2·292
½	53·472	9·336	32·465	2·334
¾	54·215	9·507	32·825	2·377
28	54·963	9·679	33·186	2·420
¼	55·715	9·853	33·547	2·463
½	56·472	10·028	33·910	2·507
¾	57·234	10·204	34·274	2·551
29	58·000	10·383	34·639	2·596
¼	58·771	10·563	35·005	2·641
½	59·546	10·744	35·373	2·686
¾	60·326	10·927	35·741	2·732
30	61·111	11·111	36·111	2·778

TABLE XXIV.—Base 29 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
30½	84·440	17·227	101·667	22·970	67·213	11·485	41·373	2·871	30½
31	86·685	17·796	104·481	23·728	68·889	11·864	42·194	2·966	31
31½	88·958	18·375	107·333	24·500	70·583	12·250	43·021	3·062	31½
32	91·259	18·963	110·222	25·284	72·296	12·642	43·852	3·160	32
32½	93·588	19·560	113·148	26·080	74·028	13·040	44·687	3·260	32½
33	95·944	20·167	116·111	26·889	75·778	13·444	45·528	3·361	33
33½	98·329	20·782	119·111	27·709	77·546	13·855	46·373	3·464	33½
34	100·741	21·407	122·148	28·543	79·333	14·272	47·222	3·568	34
34½	103·181	22·042	125·222	29·389	81·139	14·694	48·076	3·674	34½
35	105·648	22·685	128·333	30·247	82·963	15·123	48·935	3·781	35
35½	108·143	23·338	131·481	31·117	84·806	15·559	49·799	3·890	35½
36	110·667	24·000	134·667	32·000	86·667	16·000	50·667	4·000	36
36½	113·218	24·671	137·889	32·895	88·546	16·447	51·539	4·112	36½
37	115·796	25·352	141·148	33·802	90·444	16·901	52·417	4·225	37
37½	118·403	26·042	144·444	34·722	92·361	17·361	53·299	4·340	37½
38	121·037	26·741	147·778	35·654	94·296	17·827	54·185	4·457	38
38½	123·699	27·449	151·148	36·599	96·250	18·299	55·076	4·575	38½
39	126·389	28·167	154·556	37·556	98·222	18·778	55·972	4·694	39
39½	129·106	28·894	158·000	38·525	100·213	19·263	56·873	4·816	39½
40	131·852	29·630	161·481	39·506	102·222	19·753	57·778	4·933	40
40½	134·625	30·375	165·000	40·500	104·250	20·250	58·687	5·062	40½
41	137·426	31·129	168·556	41·506	106·296	20·753	59·602	5·188	41
41½	140·255	31·894	172·148	42·525	108·361	21·263	60·521	5·316	41½
42	143·111	32·667	175·778	43·556	110·444	21·778	61·444	5·444	42
42½	145·995	33·449	179·444	44·599	112·546	22·299	62·373	5·575	42½
43	148·907	34·241	183·148	45·654	114·667	22·827	63·306	5·707	43
43½	151·847	35·042	186·889	46·722	116·806	23·361	64·243	5·840	43½
44	154·815	35·852	190·667	47·802	118·963	23·901	65·185	5·975	44
44½	157·810	36·671	194·481	48·895	121·139	24·447	66·132	6·112	44½
45	160·833	37·500	198·333	50·000	123·333	25·000	67·083	6·250	45
45½	163·884	38·338	202·222	51·117	125·546	25·559	68·039	6·390	45½
46	166·963	39·185	206·148	52·247	127·778	26·123	69·000	6·531	46
46½	170·069	40·042	210·111	53·389	130·028	26·694	69·965	6·673	46½
47	173·204	40·907	214·111	54·543	132·296	27·272	70·935	6·818	47
47½	176·366	41·782	218·148	55·709	134·583	27·855	71·910	6·964	47½
48	179·556	42·667	222·222	56·889	136·889	28·444	72·889	7·111	48
48½	182·773	43·560	226·333	58·080	139·213	29·040	73·873	7·260	48½
49	186·018	44·463	230·481	59·284	141·556	29·642	74·861	7·410	49
49½	189·292	45·375	234·667	60·500	143·917	30·250	75·854	7·562	49½
50	192·593	46·296	238·889	61·728	146·296	30·864	76·852	7·716	50
50½	195·921	47·227	243·148	62·970	148·694	31·485	77·854	7·871	50½
51	199·278	48·167	247·444	64·222	151·111	32·111	78·861	8·028	51
51½	202·662	49·116	251·778	65·488	153·546	32·744	79·873	8·186	51½
52	206·074	50·074	256·148	66·765	156·000	33·383	80·889	8·346	52
52½	209·514	51·042	260·556	68·056	158·472	34·028	81·910	8·507	52½
53	212·981	52·018	265·000	69·357	160·963	34·679	82·935	8·670	53
53½	216·477	53·004	269·481	70·672	163·472	35·336	83·965	8·834	53½
54	220·000	54·000	274·000	72·000	166·000	36·000	85·000	9·000	54
54½	223·551	55·004	278·556	73·339	168·546	36·670	86·039	9·167	54½
55	227·130	56·018	283·148	74·691	171·111	37·346	87·083	9·336	55
55½	230·736	57·042	287·778	76·056	173·694	38·028	88·132	9·507	55½
56	234·370	58·074	292·444	77·432	176·296	38·716	89·185	9·679	56
56½	238·032	59·116	297·148	78·821	178·917	39·411	90·243	9·853	56½
57	241·722	60·167	301·889	80·222	181·556	40·111	91·306	10·028	57
57½	245·440	61·227	306·667	81·636	184·213	40·818	92·373	10·204	57½
58	249·185	62·296	311·481	83·061	186·889	41·531	93·444	10·383	58
58½	252·958	63·375	316·333	84·500	189·583	42·250	94·521	10·563	58½
59	256·759	64·463	321·222	85·951	192·296	42·975	95·602	10·744	59
59½	260·588	65·560	326·148	87·413	195·028	43·707	96·687	10·927	59½
60	264·444	66·667	331·111	88·889	197·778	44·444	97·778	11·111	60

TABLE XXI.—Base 26 Feet.

Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	·244	·001	·245	·002
½	·496	·004	·500	·005
¾	·753	·010	·764	·014
1	1·019	·018	1·037	·024
1¼	1·291	·029	1·319	·039
1½	1·569	·042	1·611	·056
1¾	1·855	·057	1·912	·076
2	2·148	·074	2·222	·099
2¼	2·448	·094	2·542	·125
2½	2·755	·116	2·870	·155
2¾	3·068	·140	3·208	·187
3	3·389	·167	3·556	·222
3¼	3·716	·196	3·912	·261
3½	4·051	·227	4·278	·303
3¾	4·392	·260	4·653	·347
4	4·741	·296	5·037	·395
4¼	5·096	·334	5·431	·446
4½	5·458	·375	5·833	·500
4¾	5·828	·418	6·245	·557
5	6·203	·463	6·667	·617
5¼	6·587	·510	7·097	·681
5½	6·977	·560	7·537	·747
5¾	7·374	·612	7·986	·816
6	7·778	·667	8·444	·889
6¼	8·189	·723	8·912	·965
6½	8·607	·782	9·389	1·044
6¾	9·031	·844	9·875	1·125
7	9·462	·907	10·370	1·209
7¼	9·902	·973	10·875	1·298
7½	10·347	1·042	11·389	1·389
7¾	10·800	1·112	11·912	1·483
8	11·259	1·185	12·444	1·580
8¼	11·726	1·260	12·986	1·681
8½	12·199	1·338	13·537	1·784
8¾	12·679	1·418	14·097	1·890
9	13·167	1·500	14·667	2·000
9¼	13·661	1·584	15·245	2·113
9½	14·162	1·672	15·833	2·229
9¾	14·670	1·760	16·431	2·347
10	15·185	1·852	17·037	2·470
10¼	15·707	1·946	17·653	2·594
10½	16·236	2·042	18·278	2·723
10¾	16·772	2·140	18·912	2·853
11	17·315	2·241	19·556	2·988
11¼	17·865	2·344	20·208	3·125
11½	18·421	2·449	20·870	3·265
11¾	18·985	2·557	21·542	3·409
12	19·556	2·667	22·222	3·556
12¼	20·133	2·779	22·912	3·705
12½	20·718	2·894	23·611	3·859
12¾	21·309	3·010	24·319	4·014
13	21·908	3·129	25·037	4·173
13¼	22·513	3·251	25·764	4·335
13½	23·125	3·375	26·500	4·500
13¾	23·744	3·501	27·245	4·668
14	24·371	3·630	28·000	4·839
14¼	25·003	3·760	28·764	5·014
14½	25·642	3·894	29·537	5·191
14¾	26·291	4·029	30·319	5·372
15	26·944	4·167	31·111	5·556

Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	27·605	4·307	31·912	5·742
½	28·273	4·449	32·722	5·933
¾	28·948	4·594	33·542	6·125
16	29·630	4·741	34·370	6·321
16¼	30·318	4·890	35·208	6·520
16½	31·014	5·042	36·056	6·723
16¾	31·716	5·196	36·912	6·928
17	32·425	5·352	37·778	7·136
17¼	33·142	5·510	38·653	7·347
17½	33·866	5·671	39·537	7·562
17¾	34·596	5·835	40·431	7·779
18	35·333	6·000	41·333	8·000
18¼	36·078	6·168	42·245	8·224
18½	36·828	6·338	43·167	8·451
18¾	37·587	6·510	44·097	8·681
19	38·352	6·685	45·037	8·913
19¼	39·124	6·862	45·986	9·150
19½	39·902	7·042	46·944	9·389
19¾	40·689	7·223	47·912	9·631
20	41·481	7·407	48·889	9·877
20¼	42·281	7·594	49·875	10·125
20½	43·088	7·782	50·870	10·377
20¾	43·902	7·973	51·875	10·631
21	44·722	8·167	52·889	10·889
21¼	45·550	8·362	53·912	11·150
21½	46·384	8·560	54·944	11·413
21¾	47·226	8·760	55·986	11·681
22	48·074	8·963	57·037	11·951
22¼	48·929	9·168	58·097	12·224
22½	49·792	9·375	59·167	12·500
22¾	50·661	9·585	60·245	12·779
23	51·537	9·796	61·333	13·061
23¼	52·420	10·010	62·431	13·347
23½	53·310	10·227	63·537	13·636
23¾	54·207	10·446	64·653	13·928
24	55·111	10·667	65·778	14·222
24¼	56·022	10·890	66·912	14·520
24½	56·939	11·116	68·056	14·821
24¾	57·865	11·344	69·208	15·125
25	58·796	11·574	70·370	15·432
25¼	59·735	11·807	71·542	15·742
25½	60·680	12·042	72·722	16·056
25¾	61·633	12·279	73·912	16·372
26	62·593	12·518	75·111	16·691
26¼	63·559	12·760	76·319	17·014
26½	64·532	13·004	77·537	17·339
26¾	65·513	13·251	78·764	17·668
27	66·500	13·500	80·000	18·000
27¼	67·494	13·751	81·245	18·335
27½	68·496	14·004	82·500	18·672
27¾	69·503	14·260	83·764	19·014
28	70·519	14·518	85·037	19·357
28¼	71·540	14·779	86·319	19·705
28½	72·569	15·042	87·611	20·056
28¾	73·605	15·307	88·912	20·409
29	74·648	15·574	90·222	20·765
29¼	75·698	15·844	91·542	21·125
29½	76·755	16·116	92·870	21·488
29¾	77·818	16·390	94·208	21·853
30	78·889	16·667	95·556	22·222

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights
	79·966	16·946	96·912	22·594		157·328	37·918	195·245	50·557
	81·051	17·227	98·278	22·970		158·828	38·338	197·167	51·117
	82·142	17·510	99·653	23·347		160·337	38·760	199·097	51·681
31	83·241	17·796	101·037	23·728	46	161·852	39·185	201·037	52·247
	84·346	18·084	102·431	24·113		163·374	39·612	202·986	52·816
	85·458	18·375	103·833	24·500		164·902	40·042	204·944	53·389
	86·578	18·668	105·245	24·890		166·439	40·473	206·912	53·965
32	87·703	18·963	106·667	25·284	47	167·981	40·907	208·889	54·543
	88·837	19·260	108·097	25·681		169·531	41·344	210·875	55·125
	89·977	19·560	109·537	26·080		171·088	41·782	212·870	55·709
	91·124	19·862	110·986	26·483		172·652	42·223	214·875	56·298
33	92·278	20·167	112·444	26·889	48	174·222	42·667	216·889	56·889
	93·439	20·473	113·912	27·298		175·800	43·112	218·912	57·483
	94·607	20·782	115·389	27·709		177·384	43·560	220·944	58·080
	95·781	21·094	116·875	28·125		178·976	44·010	222·986	58·681
34	96·962	21·407	118·370	28·543	49	180·574	44·463	225·037	59·284
	98·152	21·723	119·875	28·965		182·179	44·918	227·097	59·890
	99·347	22·042	121·389	29·389		183·792	45·375	229·167	60·500
	100·550	22·362	122·912	29·816		185·411	45·834	231·245	61·113
35	101·759	22·685	124·444	30·247	50	187·037	46·296	233·333	61·728
	102·976	23·010	125·986	30·681		188·670	46·760	235·431	62·347
	104·199	23·338	127·537	31·117		190·310	47·227	237·537	62·970
	105·429	23·668	129·097	31·557		191·957	47·696	239·653	63·594
36	106·667	24·000	130·667	32·000	51	193·611	48·167	241·778	64·222
	107·911	24·334	132·245	32·446		195·272	48·640	243·912	64·853
	109·162	24·671	133·833	32·895		196·939	49·116	246·056	65·488
	110·420	25·010	135·431	33·347		198·615	49·594	248·208	66·125
37	111·685	25·352	137·037	33·802	52	200·296	50·074	250·370	66·765
	112·957	25·696	138·653	34·261		201·985	50·557	252·542	67·409
	114·236	26·042	140·278	34·722		203·680	51·042	254·722	68·056
	115·522	26·390	141·912	35·187		205·383	51·529	256·912	68·705
38	116·815	26·741	143·556	35·654	53	207·093	52·018	259·111	69·357
	118·115	27·094	145·208	36·125		208·809	52·510	261·319	70·014
	119·421	27·449	146·870	36·599		210·532	53·004	263·537	70·672
	120·735	27·807	148·542	37·076		212·263	53·501	265·764	71·335
39	122·056	28·167	150·222	37·556	54	214·000	54·000	268·000	72·000
	123·383	28·529	151·912	38·039		215·744	54·501	270·245	72·668
	124·718	28·894	153·611	38·525		217·496	55·004	272·500	73·339
	126·059	29·260	155·319	39·014		219·253	55·510	274·764	74·014
40	127·408	29·630	157·037	39·506	55	221·019	56·018	277·037	74·691
	128·763	30·001	158·764	40·002		222·790	56·529	279·319	75·372
	130·125	30·375	160·500	40·500		224·569	57·042	281·611	76·056
	131·494	30·751	162·245	41·002		226·355	57·557	283·912	76·742
41	132·871	31·129	164·000	41·506	56	228·148	58·074	286·222	77·432
	134·253	31·510	165·764	42·014		229·948	58·594	288·542	78·125
	135·642	31·894	167·537	42·525		231·755	59·116	290·870	78·821
	137·040	32·279	169·319	43·039		233·568	59·640	293·208	79·520
42	138·444	32·667	171·111	43·556	57	235·389	60·167	295·556	80·222
	139·855	33·057	172·912	44·076		237·216	60·696	297·912	80·928
	141·273	33·449	174·722	44·599		239·051	61·227	300·278	81·636
	142·698	33·844	176·542	45·125		240·892	61·760	302·653	82·347
43	144·130	34·241	178·370	45·654	58	242·741	62·296	305·037	83·061
	145·568	34·640	180·208	46·187		244·596	62·834	307·431	83·779
	147·014	35·042	182·056	46·722		246·458	63·375	309·833	84·500
	148·466	35·446	183·912	47·261		248·327	63·918	312·245	85·224
44	149·925	35·852	185·778	47·802	59	250·203	64·463	314·667	85·951
	151·392	36·260	187·653	48·347		252·087	65·010	317·097	86·681
	152·866	36·671	189·537	48·895		253·977	65·560	319·537	87·413
	154·346	37·085	191·431	49·446		255·874	66·112	321·986	88·150
45	155·833	37·500	193·333	50·000	60	257·778	66·667	324·444	88·889

TABLE XXI.—Base 26 Feet—*continued.*

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights		Centre and Slopes.	Add half difference of heights	Centre and Slopes.	Add half difference of heights
¼	·243	·001	·241	·000	¼	23·299	2·871	16·839	·718
½	·491	·003	·484	·001	½	23·824	2·966	17·150	·741
¾	·743	·007	·727	·002	¾	24·354	3·063	17·464	·766
1	1·000	·012	·972	·003	16	24·889	3·161	17·778	·790
¼	1·262	·019	1·218	·005	¼	25·428	3·260	18·093	·815
½	1·528	·028	1·465	·007	½	25·972	3·361	18·410	·840
¾	1·799	·038	1·714	·009	¾	26·521	3·464	18·727	·866
2	2·074	·049	1·963	·012	17	27·074	3·568	19·046	·892
¼	2·354	·062	2·214	·016	¼	27·632	3·674	19·366	·918
½	2·638	·077	2·465	·019	½	28·194	3·781	19·687	·945
¾	2·928	·093	2·718	·023	¾	28·762	3·890	20·010	·972
3	3·222	·111	2·972	·028	18	29·333	4·000	20·333	1·000
¼	3·521	·130	3·227	·033	¼	29·910	4·112	20·658	1·028
½	3·824	·151	3·484	·039	½	30·491	4·225	20·984	1·056
¾	4·132	·174	3·741	·043	¾	31·076	4·340	21·311	1·085
4	4·444	·197	4·000	·049	19	31·667	4·457	21·639	1·114
¼	4·762	·223	4·260	·056	¼	32·262	4·575	21·968	1·144
½	5·083	·250	4·521	·062	½	32·861	4·695	22·299	1·174
¾	5·410	·279	4·783	·070	¾	33·465	4·816	22·630	1·204
5	5·741	·309	5·046	·077	20	34·074	4·939	22·963	1·235
¼	6·076	·340	5·311	·085	¼	34·687	5·063	23·297	1·266
½	6·417	·374	5·576	·093	½	35·306	5·188	23·632	1·297
¾	6·762	·408	5·843	·102	¾	35·928	5·316	23·968	1·329
6	7·111	·444	6·111	·111	21	36·556	5·444	24·306	1·361
¼	7·465	·482	6·380	·121	¼	37·187	5·575	24·644	1·394
½	7·824	·522	6·650	·130	½	37·824	5·707	24·984	1·427
¾	8·187	·562	6·922	·141	¾	38·465	5·840	25·325	1·460
7	8·556	·605	7·194	·151	22	39·111	5·975	25·667	1·494
¼	8·928	·649	7·468	·162	¼	39·762	6·112	26·010	1·528
½	9·306	·695	7·743	·174	½	40·417	6·250	26·354	1·562
¾	9·687	·742	8·019	·185	¾	41·076	6·390	26·700	1·597
8	10·074	·790	8·296	·197	23	41·741	6·531	27·046	1·633
¼	10·465	·840	8·575	·210	¼	42·410	6·674	27·394	1·668
½	10·861	·892	8·854	·223	½	43·083	6·818	27·743	1·705
¾	11·262	·945	9·135	·236	¾	43·762	6·964	28·093	1·741
9	11·667	1·000	9·417	·250	24	44·444	7·111	28·444	1·778
¼	12·076	1·056	9·700	·264	¼	45·132	7·260	28·797	1·815
½	12·491	1·115	9·984	·279	½	45·824	7·411	29·150	1·853
¾	12·910	1·174	10·269	·293	¾	46·521	7·563	29·505	1·891
10	13·333	1·235	10·556	·309	25	47·222	7·716	29·861	1·929
¼	13·762	1·297	10·843	·324	¼	47·928	7·871	30·218	1·968
½	14·194	1·361	11·132	·340	½	48·638	8·028	30·576	2·007
¾	14·632	1·427	11·422	·357	¾	49·354	8·186	30·936	2·046
11	15·074	1·494	11·713	·373	26	50·074	8·347	31·296	2·086
¼	15·521	1·562	12·005	·391	¼	50·799	8·507	31·658	2·127
½	15·972	1·633	12·299	·408	½	51·528	8·670	32·021	2·167
¾	16·428	1·704	12·593	·426	¾	52·262	8·834	32·385	2·209
12	16·889	1·778	12·889	·444	27	53·000	9·000	32·750	2·250
¼	17·354	1·853	13·186	·463	¼	53·743	9·167	33·116	2·292
½	17·824	1·929	13·484	·482	½	54·491	9·336	33·484	2·334
¾	18·299	2·007	13·783	·502	¾	55·243	9·507	33·852	2·377
13	18·778	2·086	14·083	·521	28	56·000	9·679	34·222	2·420
¼	19·262	2·167	14·385	·542	¼	56·762	9·853	34·593	2·463
½	19·750	2·250	14·687	·562	½	57·528	10·028	34·965	2·507
¾	20·243	2·334	14·991	·584	¾	58·299	10·204	35·339	2·551
14	20·741	2·419	15·296	·605	29	59·074	10·383	35·713	2·596
¼	21·243	2·507	15·602	·627	¼	59·854	10·563	36·089	2·641
½	21·750	2·596	15·910	·649	½	60·638	10·744	36·465	2·686
¾	22·262	2·686	16·218	·671	¾	61·428	10·927	36·843	2·732
15	22·778	2·778	16·528	·694	30	62·222	11·111	37·222	2·778

TABLE XXI.—Base 26 Feet—*continued.*

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights	Centre and Slopes.	Add half difference of heights		Centre and Slopes.	Add half difference of heights	Centre and Slopes.	Add half difference of heights
	63·021	11·297	37·602	2·824		119·410	25·279	62·533	6·320
	63·824	11·485	37·984	2·871		120·491	25·559	62·984	6·390
	64·632	11·674	38·366	2·918		121·576	25·840	63·436	6·460
31	65·444	11·864	38·750	2·966	46	122·667	26·123	63·889	6·531
	66·262	12·056	39·135	3·014		123·762	26·408	64·343	6·602
	67·083	12·250	39·521	3·062		124·861	26·694	64·799	6·673
	67·910	12·445	39·908	3·111		125·965	26·982	65·255	6·746
32	68·741	12·642	40·296	3·160	47	127·074	27·272	65·713	6·818
	69·576	12·840	40·686	3·210		128·187	27·563	66·172	6·891
	70·417	13·040	41·076	3·260		129·306	27·855	66·632	6·964
	71·262	13·242	41·468	3·310		130·428	28·149	67·093	7·037
33	72·111	13·444	41·861	3·361	48	131·556	28·444	67·556	7·111
	72·965	13·649	42·255	3·412		132·687	28·742	68·019	7·185
	73·824	13·855	42·650	3·464		133·824	29·040	68·484	7·260
	74·687	14·062	43·047	3·516		134·965	29·340	68·950	7·335
34	75·556	14·272	43·444	3·568	49	136·111	29·642	69·417	7·410
	76·428	14·482	43·843	3·621		137·262	29·945	69·885	7·486
	77·306	14·694	44·243	3·674		138·417	30·250	70·354	7·562
	78·187	14·908	44·644	3·727		139·576	30·556	70·825	7·639
35	79·074	15·123	45·046	3·781	50	140·741	30·864	71·296	7·716
	79·965	15·340	45·450	3·835		141·910	31·174	71·769	7·793
	80·861	15·559	45·854	3·890		143·083	31·485	72·243	7·871
	81·762	15·779	46·260	3·945		144·262	31·797	72·718	7·949
36	82·667	16·000	46·667	4·000	51	145·444	32·111	73·194	8·028
	83·576	16·223	47·075	4·056		146·632	32·427	73·672	8·107
	84·491	16·447	47·484	4·112		147·824	32·744	74·150	8·186
	85·410	16·674	47·894	4·168		149·021	33·063	74·630	8·266
37	86·333	16·901	48·306	4·225	52	150·222	33·383	75·111	8·346
	87·262	17·130	48·718	4·283		151·428	33·704	75·593	8·426
	88·194	17·361	49·132	4·340		152·638	34·028	76·076	8·507
	89·132	17·593	49·547	4·398		153·854	34·353	76·561	8·588
38	90·074	17·827	49·963	4·457	53	155·074	34·679	77·046	8·670
	91·021	18·062	50·380	4·516		156·299	35·007	77·533	8·752
	91·972	18·299	50·799	4·575		157·528	35·336	78·021	8·834
	92·928	18·538	51·218	4·634		158·762	35·667	78·510	8·917
39	93·889	18·778	51·639	4·694	54	160·000	36·000	79·000	9·000
	94·854	19·019	52·061	4·755		161·243	36·334	79·491	9·084
	95·824	19·263	52·484	4·816		162·491	36·670	79·984	9·167
	96·799	19·507	52·908	4·877		163·743	37·007	80·477	9·252
40	97·778	19·753	53·333	4·938	55	165·000	37·346	80·972	9·336
	98·762	20·001	53·760	5·000		166·262	37·686	81·468	9·421
	99·750	20·250	54·187	5·062		167·528	38·028	81·965	9·507
	100·743	20·501	54·616	5·125		168·799	38·371	82·464	9·593
41	101·741	20·753	55·046	5·188	56	170·074	38·716	82·963	9·679
	102·743	21·007	55·477	5·252		171·354	39·063	83·464	9·766
	103·750	21·263	55·910	5·316		172·638	39·411	83·965	9·853
	104·762	21·519	56·343	5·380		173·928	39·760	84·468	9·940
42	105·778	21·778	56·778	5·444	57	175·222	40·111	84·972	10·028
	106·799	22·038	57·214	5·509		176·521	40·464	85·477	10·116
	107·824	22·299	57·650	5·575		177·824	40·818	85·984	10·204
	108·854	22·563	58·089	5·641		179·132	41·174	86·491	10·293
43	109·889	22·827	58·528	5·707	58	180·444	41·531	87·000	10·383
	110·928	23·093	58·968	5·773		181·762	41·890	87·510	10·472
	111·972	23·361	59·410	5·840		183·083	42·250	88·021	10·563
	113·021	23·630	59·852	5·908		184·410	42·612	88·533	10·653
44	114·074	23·901	60·296	5·975	59	185·741	42·975	89·046	10·744
	115·132	24·174	60·741	6·043		187·076	43·340	89·561	10·835
	116·194	24·447	61·187	6·112		188·417	43·707	90·076	10·927
	117·262	24·723	61·635	6·181		189·762	44·075	90·593	11·019
45	118·333	25·000	62·083	6·250	60	191·111	44·444	91·111	11·111

TABLE XXII.—Base 27 Feet.

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	·253	·001	·255	·002	¼	28·170	4·307	32·477	5·742
½	·514	·004	·519	·005	½	28·847	4·449	33·296	5·933
¾	·781	·010	·792	·014	¾	29·531	4·594	34·125	6·125
1	1·056	·018	1·074	·024	16	30·222	4·741	34·963	6·321
¼	1·337	·029	1·366	·039	¼	30·920	4·890	35·810	6·520
½	1·625	·042	1·667	·056	½	31·625	5·042	36·667	6·723
¾	1·920	·057	1·977	·076	¾	32·337	5·196	37·532	6·928
2	2·222	·074	2·296	·099	17	33·056	5·352	38·407	7·136
¼	2·531	·094	2·625	·125	¼	33·781	5·510	39·292	7·347
½	2·847	·116	2·963	·155	½	34·514	5·671	40·185	7·562
¾	3·170	·140	3·310	·187	¾	35·253	5·835	41·088	7·779
3	3·500	·167	3·667	·222	18	36·000	6·000	42·000	8·000
¼	3·837	·196	4·032	·261	¼	36·753	6·168	42·921	8·224
½	4·181	·227	4·407	·303	½	37·514	6·338	43·852	8·451
¾	4·531	·260	4·792	·347	¾	38·281	6·510	44·792	8·681
4	4·889	·296	5·185	·395	19	39·056	6·685	45·741	8·913
¼	5·253	·334	5·588	·446	¼	39·837	6·862	46·699	9·150
½	5·625	·375	6·000	·500	½	40·625	7·042	47·667	9·389
¾	6·003	·418	6·421	·557	¾	41·420	7·223	48·644	9·631
5	6·389	·463	6·852	·617	20	42·222	7·407	49·630	9·877
¼	6·781	·510	7·292	·681	¼	43·031	7·594	50·625	10·125
½	7·181	·560	7·741	·747	½	43·847	7·782	51·630	10·377
¾	7·587	·612	8·199	·816	¾	44·670	7·973	52·644	10·631
6	8·000	·667	8·667	·889	21	45·500	8·167	53·667	10·889
¼	8·420	·723	9·144	·965	¼	46·337	8·362	54·699	11·150
½	8·847	·782	9·630	1·044	½	47·181	8·560	55·741	11·413
¾	9·281	·844	10·125	1·125	¾	48·031	8·760	56·792	11·681
7	9·722	·907	10·630	1·209	22	48·889	8·963	57·852	11·951
¼	10·170	·973	11·144	1·298	¼	49·753	9·168	58·921	12·224
½	10·625	1·042	11·667	1·389	½	50·625	9·375	60·000	12·500
¾	11·087	1·112	12·199	1·483	¾	51·503	9·585	61·088	12·779
8	11·556	1·185	12·741	1·580	23	52·389	9·796	62·185	13·061
¼	12·031	1·260	13·292	1·681	¼	53·281	10·010	63·292	13·347
½	12·514	1·338	13·852	1·784	½	54·181	10·227	64·407	13·636
¾	13·003	1·418	14·421	1·890	¾	55·087	10·446	65·532	13·928
9	13·500	1·500	15·000	2·000	24	56·000	10·667	66·667	14·222
¼	14·003	1·584	15·588	2·113	¼	56·920	10·890	67·810	14·520
½	14·514	1·672	16·185	2·229	½	57·847	11·116	68·963	14·821
¾	15·031	1·760	16·792	2·347	¾	58·781	11·344	70·125	15·125
10	15·556	1·852	17·407	2·470	25	59·722	11·574	71·296	15·432
¼	16·087	1·946	18·032	2·594	¼	60·670	11·807	72·477	15·742
½	16·625	2·042	18·667	2·723	½	61·625	12·042	73·667	16·056
¾	17·170	2·140	19·310	2·853	¾	62·587	12·279	74·866	16·372
11	17·722	2·241	19·963	2·988	26	63·556	12·518	76·074	16·691
¼	18·281	2·344	20·625	3·125	¼	64·531	12·760	77·292	17·014
½	18·847	2·449	21·296	3·265	½	65·514	13·004	78·519	17·339
¾	19·420	2·557	21·977	3·409	¾	66·503	13·251	79·755	17·668
12	20·000	2·667	22·667	3·556	27	67·500	13·500	81·000	18·000
¼	20·587	2·779	23·366	3·705	¼	68·503	13·751	82·255	18·335
½	21·181	2·894	24·074	3·859	½	69·514	14·004	83·519	18·672
¾	21·781	3·010	24·792	4·014	¾	70·531	14·260	84·792	19·014
13	22·389	3·129	25·519	4·173	28	71·556	14·518	86·074	19·357
¼	23·003	3·251	26·255	4·335	¼	72·587	14·779	87·366	19·705
½	23·625	3·375	27·000	4·500	½	73·625	15·042	88·667	20·056
¾	24·253	3·501	27·755	4·668	¾	74·670	15·307	89·977	20·409
14	24·889	3·630	28·519	4·839	29	75·722	15·574	91·296	20·765
¼	25·531	3·760	29·292	5·014	¼	76·781	15·844	92·625	21·125
½	26·181	3·894	30·074	5·191	½	77·847	16·116	93·963	21·488
¾	26·837	4·029	30·866	5·372	¾	78·920	16·390	95·310	21·853
15	27·500	4·167	31·667	5·556	30	80·000	16·667	96·667	22·222

TABLE XXII.—Base 27 Feet.

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights	Centre and Slopes.	Add half difference of heights		Centre and Slopes.	Add half difference of heights	Centre and Slopes.	Add half difference of heights
¼	81·087	16·946	98·032	22·594	¼	159·003	37·918	196·921	50·557
½	82·181	17·227	99·407	22·970	½	160·514	38·338	198·852	51·117
¾	83·281	17·510	100·792	23·347	¾	162·031	38·760	200·792	51·681
31	84·389	17·796	102·185	23·728	46	163·556	39·185	202·741	52·247
¼	85·503	18·084	103·588	24·113	¼	165·087	39·612	204·699	52·816
½	86·625	18·375	105·000	24·500	½	166·625	40·042	206·667	53·389
¾	87·753	18·668	106·421	24·890	¾	168·170	40·473	208·644	53·965
32	88·889	18·963	107·852	25·284	47	169·722	40·907	210·630	54·543
¼	90·031	19·260	109·292	25·681	¼	171·281	41·344	212·625	55·125
½	91·181	19·560	110·741	26·080	½	172·847	41·782	214·630	55·709
¾	92·337	19·862	112·199	26·483	¾	174·420	42·223	216·644	56·298
33	93·500	20·167	113·667	26·889	48	176·000	42·667	218·667	56·889
¼	94·670	20·473	115·144	27·298	¼	177·587	43·112	220·699	57·483
½	95·847	20·782	116·630	27·709	½	179·181	43·560	222·741	58·080
¾	97·031	21·094	118·125	28·125	¾	180·781	44·010	224·792	58·681
34	98·222	21·407	119·630	28·543	49	182·389	44·463	226·852	59·284
¼	99·420	21·723	121·144	28·965	¼	184·003	44·918	228·921	59·890
½	100·625	22·042	122·667	29·389	½	185·625	45·375	231·000	60·500
¾	101·837	22·362	124·199	29·816	¾	187·253	45·834	233·088	61·113
35	103·056	22·685	125·741	30·247	50	188·889	46·296	235·185	61·728
¼	104·281	23·010	127·292	30·681	¼	190·531	46·760	237·292	62·347
½	105·514	23·338	128·852	31·117	½	192·181	47·227	239·407	62·970
¾	106·753	23·668	130·421	31·557	¾	193·837	47·696	241·532	63·594
36	108·000	24·000	132·000	32·000	51	195·500	48·167	243·667	64·222
¼	109·253	24·334	133·588	32·446	¼	197·170	48·640	245·810	64·853
½	110·514	24·671	135·185	32·895	½	198·847	49·116	247·963	65·488
¾	111·781	25·010	136·792	33·347	¾	200·531	49·594	250·125	66·125
37	113·056	25·352	138·407	33·802	52	202·222	50·074	252·296	66·765
¼	114·337	25·696	140·032	34·261	¼	203·920	50·557	254·477	67·409
½	115·625	26·042	141·667	34·722	½	205·625	51·042	256·667	68·056
¾	116·920	26·390	143·310	35·187	¾	207·337	51·529	258·866	68·705
38	118·222	26·741	144·963	35·654	53	209·056	52·018	261·074	69·357
¼	119·531	27·094	146·625	36·125	¼	210·781	52·510	263·292	70·014
½	120·847	27·449	148·296	36·599	½	212·514	53·004	265·519	70·672
¾	122·170	27·807	149·977	37·076	¾	214·253	53·501	267·755	71·335
39	123·500	28·167	151·667	37·556	54	216·000	54·000	270·000	72·000
¼	124·837	28·529	153·366	38·039	¼	217·753	54·501	272·255	72·668
½	126·181	28·894	155·074	38·525	½	219·514	55·004	274·519	73·339
¾	127·531	29·260	156·792	39·014	¾	221·281	55·510	276·792	74·014
40	128·889	29·630	158·519	39·506	55	223·056	56·018	279·074	74·691
¼	130·253	30·001	160·255	40·002	¼	224·837	56·529	281·366	75·372
½	131·625	30·375	162·000	40·500	½	226·625	57·042	283·667	76·056
¾	133·003	30·751	163·755	41·002	¾	228·420	57·557	285·977	76·742
41	134·389	31·129	165·519	41·506	56	230·222	58·074	288·296	77·432
¼	135·781	31·510	167·292	42·014	¼	232·031	58·594	290·625	78·125
½	137·181	31·894	169·074	42·525	½	233·847	59·116	292·963	78·821
¾	138·587	32·279	170·866	43·039	¾	235·670	59·640	295·310	79·520
42	140·000	32·667	172·667	43·556	57	237·500	60·167	297·667	80·222
¼	141·420	33·057	174·477	44·076	¼	239·337	60·696	300·032	80·928
½	142·847	33·449	176·296	44·599	½	241·181	61·227	302·407	81·636
¾	144·281	33·844	178·125	45·125	¾	243·031	61·760	304·792	82·347
43	145·722	34·241	179·963	45·654	58	244·889	62·296	307·185	83·061
¼	147·170	34·640	181·810	46·187	¼	246·753	62·834	309·588	83·779
½	148·625	35·042	183·667	46·722	½	248·625	63·375	312·000	84·500
¾	150·087	35·446	185·532	47·261	¾	250·503	63·918	314·421	85·224
44	151·556	35·852	187·407	47·802	59	252·389	64·463	316·852	85·951
¼	153·031	36·260	189·292	48·347	¼	254·281	65·010	319·292	86·681
½	154·514	36·671	191·185	48·895	½	256·181	65·560	321·741	87·413
¾	156·003	37·085	193·088	49·446	¾	258·087	66·112	324·199	88·150
45	157·500	37·500	195·000	50·000	60	260·000	66·667	326·667	88·889

TABLE XXII.—Base 27 Feet—*continued.*

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights	Centre and Slopes.	Add half difference of heights
	·252	·001	·251	·000		23·863	2·871	17·403	·718
	·509	·003	·502	·001		24·398	2·966	17·725	·741
	·771	·007	·755	·002		24·937	3·063	18·047	·766
1	1·037	·012	1·010	·003	16	25·482	3·161	18·370	·790
	1·308	·019	1·264	·005		26·030	3·260	18·695	·815
	1·584	·028	1·521	·007		26·584	3·361	19·021	·840
	1·863	·038	1·778	·009		27·141	3·464	19·348	·866
2	2·148	·049	2·037	·012	17	27·704	3·568	19·676	·892
	2·437	·062	2·297	·016		28·271	3·674	20·005	·918
	2·731	·077	2·558	·019		28·843	3·781	20·336	·945
	3·030	·093	2·820	·023		29·419	3·890	20·667	·972
3	3·333	·111	3·083	·028	18	30·000	4·000	21·000	1·000
	3·641	·130	3·348	·033		30·586	4·112	21·334	1·028
	3·953	·151	3·613	·039		31·176	4·225	21·669	1·056
	4·271	·174	3·880	·043		31·771	4·340	22·005	1·085
4	4·593	·197	4·148	·049	19	32·370	4·457	22·343	1·114
	4·919	·223	4·417	·056		32·975	4·575	22·681	1·144
	5·250	·250	4·688	·062		33·584	4·695	23·021	1·174
	5·586	·279	4·959	·070		34·197	4·816	23·362	1·204
5	5·926	·309	5·232	·077	20	34·815	4·939	23·704	1·235
	6·271	·340	5·505	·085		35·437	5·063	24·047	1·266
	6·621	·374	5·780	·093		36·065	5·188	24·391	1·297
	6·975	·408	6·056	·102		36·697	5·316	24·737	1·329
6	7·333	·444	6·333	·111	21	37·333	5·444	25·083	1·361
	7·697	·482	6·612	·121		37·975	5·575	25·431	1·394
	8·065	·522	6·891	·130		38·621	5·707	25·780	1·427
	8·437	·562	7·172	·141		39·271	5·840	26·130	1·460
7	8·815	·605	7·454	·151	22	39·926	5·975	26·481	1·494
	9·197	·649	7·737	·162		40·586	6·112	26·834	1·528
	9·584	·695	8·021	·174		41·250	6·250	27·187	1·562
	9·975	·742	8·306	·185		41·919	6·390	27·542	1·597
8	10·370	·790	8·593	·197	23	42·593	6·531	27·898	1·633
	10·771	·840	8·880	·210		43·271	6·674	28·255	1·668
	11·176	·892	9·169	·223		43·953	6·818	28·613	1·705
	11·586	·945	9·459	·236		44·641	6·964	28·973	1·741
9	12·000	1·000	9·750	·250	24	45·333	7·111	29·333	1·778
	12·419	1·056	10·042	·264		46·030	7·260	29·695	1·815
	12·843	1·115	10·336	·279		46·731	7·411	30·058	1·853
	13·271	1·174	10·630	·293		47·437	7·563	30·422	1·891
10	13·704	1·235	10·926	·309	25	48·148	7·716	30·787	1·929
	14·141	1·297	11·223	·324		48·863	7·871	31·153	1·968
	14·584	1·361	11·521	·340		49·584	8·028	31·521	2·007
	15·030	1·427	11·820	·357		50·308	8·186	31·889	2·046
11	15·482	1·494	12·120	·373	26	51·037	8·347	32·259	2·086
	15·937	1·562	12·422	·391		51·771	8·507	32·630	2·127
	16·398	1·633	12·725	·408		52·509	8·670	33·002	2·167
	16·863	1·704	13·028	·426		53·252	8·834	33·376	2·209
12	17·333	1·778	13·333	·444	27	54·000	9·000	33·750	2·250
	17·808	1·853	13·639	·463		54·752	9·167	34·126	2·292
	18·286	1·929	13·947	·482		55·509	9·336	34·502	2·334
	18·771	2·007	14·255	·502		56·271	9·507	34·880	2·377
13	19·260	2·086	14·565	·521	28	57·037	9·679	35·259	2·420
	19·752	2·167	14·876	·542		57·808	9·853	35·639	2·463
	20·250	2·250	15·187	·562		58·584	10·028	36·021	2·507
	20·752	2·334	15·501	·584		59·363	10·204	36·403	2·551
14	21·260	2·419	15·815	·605	29	60·148	10·383	36·787	2·596
	21·771	2·507	16·130	·627		60·937	10·563	37·172	2·641
	22·286	2·596	16·447	·649		61·731	10·744	37·558	2·686
	22·808	2·686	16·764	·671		62·530	10·927	37·945	2·732
15	23·333	2·778	17·083	·694	30	63·333	11·111	38·333	2·778

TABLE XXII.—Base 27 Feet—*continued.*

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights	Centre and Slopes	Add half difference of heights
¼	64·141	11·297	38·723	2·824	¼	121·086	25·279	64·209	6·320
½	64·953	11·485	39·113	2·871	½	122·176	25·559	64·669	6·390
¾	65·771	11·674	39·505	2·918	¾	123·271	25·840	65·130	6·460
31	66·593	11·864	39·898	2·966	46	124·370	26·123	65·593	6·531
¼	67·419	12·056	40·292	3·014	¼	125·475	26·408	66·056	6·602
½	68·250	12·250	40·687	3·062	½	126·584	26·694	66·521	6·673
¾	69·086	12·445	41·084	3·111	¾	127·697	26·982	66·987	6·746
32	69·926	12·642	41·481	3·160	47	128·815	27·272	67·454	6·818
¼	70·771	12·840	41·880	3·210	¼	129 937	27·563	67·922	6·891
½	71·621	13·040	42·280	3·260	½	131·065	27·855	68·391	6·964
¾	72·475	13·242	42·681	3·310	¾	132·197	28·149	68·862	7·037
33	73·333	13·444	43·083	3·361	48	133·333	28·444	69·333	7·111
¼	74·197	13·649	43·487	3·412	¼	134·475	28·742	69·806	7·185
½	75·065	13·855	43·891	3·464	½	135·621	29·040	70·280	7·260
¾	75·937	14·062	44·297	3·516	¾	136·771	29·340	70·755	7·335
34	76·815	14·272	44·704	3·568	49	137·926	29·642	71·232	7·410
¼	77·697	14·482	45·112	3·621	¼	139·086	29·945	71·709	7·486
½	78·584	14·694	45·521	3·674	½	140·250	30·250	72·188	7·562
¾	79·475	14·908	45·931	3·727	¾	141·419	30·556	72·667	7·639
35	80·370	15·123	46·343	3·781	50	142·593	30·864	73·148	7·716
¼	81·271	15·340	46·755	3·835	¼	143·771	31·174	73·630	7·793
½	82·176	15·559	47·169	3·890	½	144·953	31·485	74·113	7·871
¾	83·086	15·779	47·584	3·945	¾	146·141	31·797	74·598	7·949
36	84·000	16·000	48·000	4·000	51	147·333	32·111	75·083	8·028
¼	84·919	16·223	48·417	4·056	¼	148·530	32·427	75·570	8·107
½	85·843	16·447	48·836	4·112	½	149·731	32·744	76·058	8·186
¾	86·771	16·674	49·255	4·168	¾	150·937	33·063	76·547	8·266
37	87·704	16·901	49·676	4·225	52	152·148	33·383	77·037	8·346
¼	88·641	17·130	50·098	4·283	¼	153·363	33·704	77·528	8·426
½	89·584	17·361	50·521	4 340	½	154·584	34·028	78·021	8·507
¾	90·530	17·593	50·945	4·398	¾	155·808	34·353	78·514	8·588
38	91·482	17·827	51·370	4·457	53	157·037	34·679	79·010	8·670
¼	92·437	18·062	51·797	4·516	¼	158 271	35·007	79·505	8·752
½	93·398	18·299	52·225	4·575	½	159·509	35·336	80·002	8·834
¾	94·363	18·538	52·653	4·634	¾	160·752	35·667	80·501	8·917
39	95·333	18·778	53·083	4·694	54	162·000	36·000	81·000	9·000
¼	96·308	19·019	53·514	4·755	¼	163·252	36·334	81·501	9·084
½	97·286	19·263	53·947	4·816	½	164·509	36·670	82·002	9·167
¾	98·271	19·507	54·380	4·877	¾	165·771	37·007	82·505	9·252
40	99·260	19·753	54·815	4·938	55	167 037	37·346	83·010	9·336
¼	100·252	20·001	55·251	5·000	¼	168·308	37·686	83·514	9·421
½	101·250	20·250	55·687	5·062	½	169·584	38·028	84·021	9·507
¾	102·252	20·501	56·126	5·125	¾	170·863	38·371	84·528	9·593
41	103·260	20·753	56·565	5·188	56	172·148	38·716	85·037	9·679
¼	104·271	21·007	57·005	5·252	¼	173·437	39·063	85·547	9·766
½	105·286	21·263	57·447	5·316	½	174·731	39·411	86·058	9·853
¾	106·308	21·519	57·889	5·380	¾	176·030	39·760	86·570	9·940
42	107·333	21·778	58·333	5·444	57	177·333	40·111	87·083	10·028
¼	108·363	22·038	58·778	5·509	¼	178·641	40·464	87·598	10·116
½	109·398	22·299	59·225	5·575	½	179·953	40·818	88·113	10·204
¾	110·437	22·563	59·672	5·641	¾	181·271	41·174	88·630	10·293
43	111·482	22·827	60·120	5·707	58	182·593	41·531	89·148	10·383
¼	112·530	23·093	60·570	5·773	¼	183·919	41·890	89·667	10·472
½	113·584	23·361	61·021	5·840	½	185·250	42·250	90·188	10·563
¾	114 641	23·630	61·473	5·908	¾	186·586	42·612	90·709	10·653
44	115·704	23·901	61·926	5·975	59	187·926	42·975	91·232	10·744
¼	116·771	24·174	62·380	6·043	¼	189·271	43·340	91·755	10·835
½	117·843	24·447	62·836	6·112	½	190·621	43·707	92·280	10·927
¾	118·919	24·723	63·292	6·181	¾	191·975	44·075	92·806	11·019
45	120·000	25·000	63·750	6·250	60	193·333	44·444	93·333	11·111

TABLE XXIII.—Base 28 Feet.

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	·263	·001	·264	·002	¼	28·735	4·307	33·042	5·742
½	·532	·004	·537	·005	½	29·421	4·449	33·870	5·933
¾	·809	·010	·819	·014	¾	30·115	4·594	34·708	6·125
1	1·092	·018	1·111	·024	16	30·815	4·741	35·556	6·321
¼	1·383	·029	1·412	·039	¼	31·522	4·890	36·412	6·520
½	1·681	·042	1·722	·056	½	32·236	5·042	37·278	6·723
¾	1·985	·057	2·042	·076	¾	32·958	5·196	38·153	6·928
2	2·296	·074	2·370	·099	17	33·685	5·352	39·037	7·136
¼	2·615	·094	2·708	·125	¼	34·420	5·510	39·931	7·347
½	2·940	·116	3·056	·155	½	35·162	5·671	40·833	7·562
¾	3·272	·140	3·412	·187	¾	35·911	5·835	41·745	7·779
3	3·611	·167	3·778	·222	18	36·667	6·000	42·667	8·000
¼	3·958	·196	4·153	·261	¼	37·430	6·168	43·597	8·224
½	4·311	·227	4·537	·303	½	38·199	6·338	44·537	8·451
¾	4·670	·260	4·931	·347	¾	38·975	6·510	45·486	8·681
4	5·037	·296	5·333	·395	19	39·759	6·685	46·444	8·913
¼	5·410	·334	5·745	·446	¼	40·549	6·862	47·412	9·150
½	5·792	·375	6·167	·500	½	41·347	7·042	48·389	9·389
¾	6·180	·418	6·597	·557	¾	42·151	7·223	49·375	9·631
5	6·574	·463	7·037	·617	20	42·963	7·407	50·370	9·877
¼	6·975	·510	7·486	·681	¼	43·781	7·594	51·375	10·125
½	7·384	·560	7·944	·747	½	44·607	7·782	52·389	10·377
¾	7·799	·612	8·412	·816	¾	45·438	7·973	53·412	10·631
6	8·222	·667	8·889	·889	21	46·278	8·167	54·444	10·889
¼	8·651	·723	9·375	·965	¼	47·124	8·362	55·486	11·150
½	9·088	·782	9·870	1·044	½	47·977	8·560	56·537	11·413
¾	9·531	·844	10·375	1·125	¾	48·836	8·760	57·597	11·681
7	9·982	·907	10·889	1·209	22	49·704	8·963	58·667	11·951
¼	10·438	·973	11·412	1·298	¼	50·578	9·168	59·745	12·224
½	10·903	1·042	11·944	1·389	½	51·458	9·375	60·833	12·500
¾	11·374	1·112	12·486	1·483	¾	52·347	9·585	61·931	12·779
8	11·852	1·185	13·037	1·580	23	53·241	9·796	63·037	13·061
¼	12·336	1·260	13·597	1·681	¼	54·142	10·010	64·153	13·347
½	12·829	1·338	14·167	1·784	½	55·051	10·227	65·278	13·636
¾	13·328	1·418	14·745	1·890	¾	55·967	10·446	66·412	13·928
9	13·833	1·500	15·333	2·000	24	56·889	10·667	67·556	14·222
¼	14·346	1·584	15·931	2·113	¼	57·818	10·890	68·708	14·520
½	14·866	1·672	16·537	2·229	½	58·754	11·116	69·870	14·821
¾	15·392	1·760	17·153	2·347	¾	59·698	11·344	71·042	15·125
10	15·926	1·852	17·778	2·470	25	60·648	11·574	72·222	15·432
¼	16·467	1·946	18·412	2·594	¼	61·606	11·807	73·412	15·742
½	17·014	2·042	19·056	2·723	½	62·569	12·042	74·611	16·056
¾	17·568	2·140	19·708	2·853	¾	63·541	12·279	75·819	16·372
11	18·130	2·241	20·370	2·988	26	64·518	12·518	77·037	16·691
¼	18·698	2·344	21·042	3·125	¼	65·503	12·760	78·264	17·014
½	19·273	2·449	21·722	3·265	½	66·495	13·004	79·500	17·339
¾	19·856	2·557	22·412	3·409	¾	67·494	13·251	80·745	17·668
12	20·444	2·667	23·111	3·556	27	68·500	13·500	82·000	18·000
¼	21·041	2·779	23·819	3·705	¼	69·513	13·751	83·264	18·335
½	21·643	2·894	24·537	3·859	½	70·532	14·004	84·537	18·672
¾	22·253	3·010	25·264	4·014	¾	71·559	14·260	85·819	19·014
13	22·870	3·129	26·000	4·173	28	72·592	14·518	87·111	19·357
¼	23·494	3·251	26·745	4·335	¼	73·633	14·779	88·412	19·705
½	24·125	3·375	27·500	4·500	½	74·681	15·042	89·722	20·056
¾	24·763	3·501	28·264	4·668	¾	75·735	15·307	91·042	20·409
14	25·407	3·630	29·037	4·839	29	76·796	15·574	92·370	20·765
¼	26·059	3·760	29·819	5·014	¼	77·865	15·844	93·708	21·125
½	26·718	3·894	30·611	5·191	½	78·940	16·116	95·056	21·488
¾	27·383	4·029	31·412	5·372	¾	80·022	16·390	96·412	21·853
15	28·056	4·167	32·222	5·556	30	81·111	16·667	97·778	22·222

Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	82·208	16·946	99·153	22·594
	83·311	17·227	100·537	22·970
	84·420	17·510	101·931	23·347
31	85·537	17·796	103·333	23·728
	86·660	18·084	104·745	24·113
	87·792	18·375	106·167	24·500
	88·930	18·668	107·597	24·890
32	90·074	18·963	109·037	25·284
	91·225	19·260	110·486	25·681
	92·384	19·560	111·944	26·080
	93·549	19·862	113·412	26·483
33	94·722	20·167	114·889	26·889
	95·901	20·473	116·375	27·298
	97·088	20·782	117·870	27·709
	98·281	21·094	119·375	28·125
34	99·482	21·407	120·889	28·543
	100·688	21·723	122·412	28·965
	101·903	22·042	123·944	29·389
	103·124	22·362	125·486	29·816
35	104·352	22·685	127·037	30·247
	105·586	23·010	128·597	30·681
	106·829	23·338	130·167	31·117
	108·078	23·668	131·745	31·557
36	109·333	24·000	133·333	32·000
	110·596	24·334	134·931	32·446
	111·866	24·671	136·537	32·895
	113·142	25·010	138·153	33·347
37	114·426	25·352	139·778	33·802
	115·717	25·696	141·412	34·261
	117·014	26·042	143·056	34·722
	118·318	26·390	144·708	35·187
38	119·630	26·741	146·370	35·654
	120·948	27·094	148·042	36·125
	122·273	27·449	149·722	36·599
	123·606	27·807	151·412	37·076
39	124·944	28·167	153·111	37·556
	126·291	28·529	154·819	38·039
	127·643	28·894	156·537	38·525
	129·003	29·260	158·264	39·014
40	130·370	29·630	160·000	39·506
	131·744	30·001	161·745	40·002
	133·125	30·375	163·500	40·500
	134·513	30·751	165·264	41·002
41	135·907	31·129	167·037	41·506
	137·309	31·510	168·819	42·014
	138·718	31·894	170·611	42·525
	140·133	32·279	172·412	43·039
42	141·556	32·667	174·222	43·556
	142·985	33·057	176·042	44·076
	144·421	33·449	177·870	44·599
	145·865	33·844	179·708	45·125
43	147·315	34·241	181·556	45·654
	148·772	34·640	183·412	46·187
	150·236	35·042	185·278	46·722
	151·708	35·446	187·153	47·261
44	153·185	35 852	189·037	47·802
	154·670	36·260	190·931	48·347
	156·162	36·671	192·833	48·895
	157·661	37·085	194·745	49·446
45	159·167	37·500	196·667	50·000

Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	160·680	37·918	198·597	50·557
	162·199	38·338	200·537	51·117
	163·725	38·760	202·486	51·681
46	165·259	39·185	204·444	52·247
	166·799	39·612	206·412	52·816
	168·347	40 042	208·389	53·389
	169·901	40·473	210·373	53·965
47	171·463	40·907	212·370	54·543
	173·031	41·344	214·375	55·125
	174·607	41·782	216·389	55·709
	176·188	42·223	218·412	56·298
48	177·778	42·667	220·444	56·889
	179·374	43·112	222·486	57·483
	180·977	43·560	224·537	58·080
	182·586	44·010	226·597	58·681
49	184·204	44·463	228·667	59·284
	185·828	44·918	230·745	59·890
	187·458	45·375	232·833	60·500
	189·096	45·834	234·931	61·113
50	190·741	46·296	237·037	61·728
	192·392	46·760	239·153	62·347
	194·051	47·227	241·278	62·970
	195·717	47·696	243·412	63·594
51	197·389	48·167	245·556	64·222
	199·068	48·640	247·708	64·853
	200·754	49·116	249·870	65·488
	202·448	49·594	252·042	66·125
52	204·148	50·074	254·222	66·765
	205·856	50·557	256·412	67·409
	207·569	51·042	258·611	68·056
	209·291	51·529	260·819	68·705
53	211·018	52·018	263·037	69·357
	212·753	52·510	265·264	70·014
	214·495	53·004	267·500	70·672
	216·244	53·501	269·745	71·335
54	218·000	54·000	272·000	72·000
	219·763	54·501	274·264	72·668
	221·532	55·004	276·537	73·339
	223·309	55·510	278·819	74·014
55	225·092	56·018	281·111	74·691
	226·883	56·529	283·412	75·372
	228·681	57·042	285·722	76·056
	230·485	57·557	288·042	76·742
56	232·296	58·074	290·370	77·432
	234·115	58·594	292·708	78·125
	235·940	59·116	295·056	78·821
	237·772	59·640	297·412	79·520
57	239·611	60·167	299·778	80·222
	241·458	60·696	302·153	80·928
	243·311	61·227	304·537	81·636
	245·170	61·760	306·931	82·347
58	247·037	62·296	309·333	83·061
	248·910	62·834	311·745	83·779
	250·792	63·375	314·167	84·500
	252·680	63·918	316·597	85·224
59	254·574	64·463	319·037	85·951
	256·475	65·010	321·486	86·681
	258·384	65·560	323·944	87·413
	260·299	66·112	326·412	88·150
60	262·222	66·667	328·889	88·889

TABLE XXIX.—Base 34 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·644	·004	·648	·005	·639	·003	·632	·001	½
1	1·315	·018	1·333	·024	1·296	·012	1·269	·003	1
1½	2·014	·042	2·056	·056	1·972	·028	1·910	·007	1½
2	2·741	·074	2·815	·099	2·667	·049	2·556	·012	2
2½	3·495	·116	3·611	·155	3·380	·077	3·206	·019	2½
3	4·278	·167	4·444	·222	4·111	·111	3·861	·028	3
3½	5·088	·227	5·315	·303	4·861	·151	4·521	·039	3½
4	5·926	·296	6·222	·395	5·630	·197	5·185	·049	4
4½	6·792	·375	7·167	·500	6·417	·250	5·854	·062	4½
5	7·685	·463	8·148	·617	7·222	·309	6·528	·077	5
5½	8·606	·560	9·167	·747	8·046	·374	7·206	·093	5½
6	9·556	·667	10·222	·889	8·889	·444	7·889	·111	6
6½	10·532	·782	11·315	1·044	9·750	·522	8·576	·130	6½
7	11·537	·907	12·444	1·209	10·630	·605	9·268	·151	7
7½	12·569	1·042	13·611	1·389	11·528	·695	9·965	·174	7½
8	13·630	1·185	14·815	1·580	12·444	·790	10·667	·197	8
8½	14·718	1·338	16·056	1·784	13·380	·892	11·373	·223	8½
9	15·833	1·500	17·333	2·000	14·333	1·000	12·083	·250	9
9½	16·977	1·672	18·648	2·229	15·306	1·115	12·799	·279	9½
10	18·148	1·852	20·000	2·470	16·296	1·235	13·518	·309	10
10½	19·347	2·042	21·389	2·723	17·306	1·361	14·243	·340	10½
11	20·574	2·241	22·815	2·988	18·333	1·494	14·972	·373	11
11½	21·829	2·449	24·278	3·265	19·380	1·633	15·706	·408	11½
12	23·111	2·667	25·778	3·556	20·444	1·778	16·444	·444	12
12½	24·421	2·894	27·315	3·859	21·528	1·929	17·187	·482	12½
13	25·759	3·129	28·889	4·173	22·630	2·086	17·935	·521	13
13½	27·125	3·375	30·500	4·500	23·750	2·250	18·687	·562	13½
14	28·519	3·630	32·148	4·839	24·889	2·419	19·444	·605	14
14½	29·940	3·894	33·833	5·191	26·046	2·596	20·206	·649	14½
15	31·389	4·167	35·556	5·556	27·222	2·778	20·972	·694	15
15½	32·866	4·449	37·315	5·933	28·417	2·966	21·743	·741	15½
16	34·370	4·741	39·111	6·321	29·630	3·161	22·518	·790	16
16½	35·903	5·042	40·944	6·723	30·861	3·361	23·299	·840	16½
17	37·463	5·352	42·815	7·136	32·111	3·568	24·083	·892	17
17½	39·051	5·671	44·722	7·562	33·380	3·781	24·873	·945	17½
18	40·667	6·000	46·667	8·000	34·667	4·000	25·667	1·000	18
18½	42·310	6·338	48·648	8·451	35·972	4·225	26·465	1·056	18½
19	43·981	6·685	50·667	8·913	37·296	4·457	27·268	1·114	19
19½	45·681	7·042	52·722	9·389	38·639	4·695	28·076	1·174	19½
20	47·407	7·407	54·815	9·877	40·000	4·939	28·889	1·235	20
20½	49·162	7·782	56·944	10·377	41·380	5·188	29·706	1·297	20½
21	50·944	8·167	59·111	10·889	42·778	5·444	30·528	1·361	21
21½	52·754	8·560	61·315	11·413	44·194	5·707	31·354	1·427	21½
22	54·593	8·963	63·556	11·951	45·630	5·975	32·185	1·494	22
22½	56·458	9·375	65·833	12·500	47·083	6·250	33·021	1·562	22½
23	58·352	9·796	68·148	13·061	48·556	6·531	33·861	1·633	23
23½	60·273	10·227	70·500	13·636	50·046	6·818	34·706	1·705	23½
24	62·222	10·667	72·889	14·222	51·556	7·111	35·556	1·778	24
24½	64·199	11·116	75·315	14·821	53·083	7·411	36·410	1·853	24½
25	66·204	11·574	77·778	15·432	54·630	7·716	37·268	1·929	25
25½	68·236	12·042	80·278	16·056	56·194	8·028	38·132	2·007	25½
26	70·296	12·518	82·815	16·691	57·778	8·347	39·000	2·086	26
26½	72·384	13·004	85·389	17·339	59·380	8·670	39·873	2·167	26½
27	74·500	13·500	88·000	18·000	61·000	9·000	40·750	2·250	27
27½	76·643	14·004	90·648	18·672	62·639	9·336	41·632	2·334	27½
28	78·815	14·518	93·333	19·357	64·296	9·679	42·518	2·420	28
28½	81·014	15·042	96·056	20·056	65·972	10·028	43·410	2·507	28½
29	83·241	15·574	98·815	20·765	67·667	10·383	44·306	2·596	29
29½	85·496	16·116	101·611	21·488	69·380	10·744	45·206	2·686	29½
30	87·778	16·667	104·444	22·222	71·111	11·111	46·111	2·778	30

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	65·262	11·297	39·843	2·824		122·762	25·279	65·885	6·320
	66·083	11·485	40·243	2·871		123·861	25·559	66·354	6·390
	66·910	11·674	40·644	2·918		124·965	25·840	66·825	6·460
31	67·741	11·864	41·046	2·966	46	126·074	26·123	67·296	6·531
	68·576	12·056	41·450	3·014		127·187	26·408	67·769	6·602
	69·417	12·250	41·854	3·062		128·306	26·694	68·243	6·673
	70·262	12·445	42·260	3·111		129·428	26·982	68·718	6·746
32	71·111	12·642	42·667	3·160	47	130·556	27·272	69·194	6·818
	71·965	12·840	43·075	3·210		131·687	27·563	69·672	6·891
	72·824	13·040	43·484	3·260		132·824	27·855	70·150	6·964
	73·687	13·242	43·894	3·310		133·965	28·149	70·630	7·037
33	74·556	13·444	44·306	3·361	48	135·111	28·444	71·111	7·111
	75·428	13·649	44·718	3·412		136·262	28·742	71·593	7·185
	76·306	13·855	45·132	3·464		137·417	29·040	72·076	7·260
	77·187	14·062	45·547	3·516		138·576	29·340	72·561	7·335
34	78·074	14·272	45·963	3·568	49	139·741	29·642	73·046	7·410
	78·965	14·482	46·380	3·621		140·910	29·945	73·533	7·486
	79·861	14·694	46·799	3·674		142·083	30·250	74·021	7·562
	80·762	14·908	47·218	3·727		143·262	30·556	74·510	7·639
35	81·667	15·123	47·639	3·781	50	144·444	30·864	75·000	7·716
	82·576	15·340	48·061	3·835		145·632	31·174	75·491	7·793
	83·491	15·559	48·484	3·890		146·824	31·485	75·984	7·871
	84·410	15·779	48·908	3·945		148·021	31·797	76·477	7·949
36	85·333	16·000	49·333	4·000	51	149·222	32·111	76·972	8·028
	86·262	16·223	49·760	4·056		150·428	32·427	77·468	8·107
	87·194	16·447	50·187	4·112		151·638	32·744	77·965	8·186
	88·132	16·674	50·616	4·168		152·854	33·063	78·464	8·266
37	89·074	16·901	51·046	4·225	52	154·074	33·383	78·963	8·346
	90·021	17·130	51·477	4·283		155·299	33·704	79·464	8·426
	90·972	17·361	51·910	4·340		156·528	34·028	79·965	8·507
	91·928	17·593	52·343	4·398		157·762	34·353	80·468	8·588
38	92·889	17·827	52·778	4·457	53	159·000	34·679	80·972	8·670
	93·854	18·062	53·214	4·516		160·243	35·007	81·477	8·752
	94·824	18·299	53·650	4·575		161·491	35·336	81·984	8·834
	95·799	18·538	54·089	4·634		162·743	35·667	82·491	8·917
39	96·778	18·778	54·528	4·694	54	164·000	36·000	83·000	9·000
	97·762	19·019	54·968	4·755		165·262	36·334	83·510	9·084
	98·750	19·263	55·410	4·816		166·528	36·670	84·021	9·167
	99·743	19·507	55·852	4·877		167·799	37·007	84·533	9·252
40	100·741	19·753	56·296	4·938	55	169·074	37·346	85·046	9·336
	101·743	20·001	56·741	5·000		170·354	37·686	85·561	9·421
	102·750	20·250	57·187	5·062		171·638	38·028	86·076	9·507
	103·762	20·501	57·635	5·125		172·928	38·371	86·593	9·593
41	104·778	20·753	58·083	5·188	56	174·222	38·716	87·111	9·679
	105·799	21·007	58·533	5·252		175·521	39·063	87·630	9·766
	106·824	21·263	58·984	5·316		176·824	39·411	88·150	9·853
	107·854	21·519	59·436	5·380		178·132	39·760	88·672	9·940
42	108·889	21·778	59·889	5·444	57	179·444	40·111	89·194	10·028
	109·928	22·038	60·343	5·509		180·762	40·464	89·718	10·116
	110·972	22·299	60·799	5·575		182·083	40·818	90·243	10·204
	112·021	22·563	61·255	5·641		183·410	41·174	90·769	10·293
43	113·074	22·827	61·713	5·707	58	184·741	41·531	91·296	10·383
	114·132	23·093	62·172	5·773		186·076	41·890	91·825	10·472
	115·194	23·361	62·632	5·840		187·417	42·250	92·354	10·563
	116·262	23·630	63·093	5·908		188·762	42·612	92·885	10·653
44	117·333	23·901	63·556	5·975	59	190·111	42·975	93·417	10·744
	118·410	24·174	64·019	6·043		191·465	43·340	93·950	10·835
	119·491	24·447	64·484	6·112		192·824	43·707	94·484	10·927
	120·576	24·723	64·950	6·181		194·187	44·075	95·019	11·019
45	121·667	25·000	65·417	6·250	60	195·556	44·444	95·556	11·111

TABLE XXIV.—Base 29 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·551	·004	·556	·005	·546	·003	·539	·001	½
1	1·130	·018	1·148	·024	1·111	·012	1·083	·003	1
1½	1·736	·042	1·778	·056	1·694	·028	1·632	·007	1½
2	2·370	·074	2·444	·099	2·296	·049	2·185	·012	2
2½	3·032	·116	3·148	·155	2·917	·077	2·743	·019	2½
3	3·722	·167	3·889	·222	3·556	·111	3·306	·028	3
3½	4·440	·227	4·667	·303	4·213	·151	3·873	·039	3½
4	5·185	·296	5·481	·395	4·889	·197	4·444	·049	4
4½	5·958	·375	6·333	·500	5·583	·250	5·021	·062	4½
5	6·759	·463	7·222	·617	6·296	·309	5·602	·077	5
5½	7·588	·560	8·148	·747	7·028	·374	6·187	·093	5½
6	8·444	·667	9·111	·889	7·778	·444	6·778	·111	6
6½	9·329	·782	10·111	1·044	8·546	·522	7·373	·130	6½
7	10·241	·907	11·148	1·209	9·333	·605	7·972	·151	7
7½	11·181	1·042	12·222	1·389	10·139	·695	8·576	·174	7½
8	12·148	1·185	13·333	1·580	10·963	·790	9·185	·197	8
8½	13·143	1·338	14·481	1·784	11·806	·892	9·799	·223	8½
9	14·167	1·500	15·667	2·000	12·667	1·000	10·417	·250	9
9½	15·218	1·672	16·889	2·229	13·546	1·115	11·039	·279	9½
10	16·296	1·852	18·148	2·470	14·444	1·235	11·667	·309	10
10½	17·403	2·042	19·444	2·723	15·361	1·361	12·299	·340	10½
11	18·537	2·241	20·778	2·988	16·296	1·494	12·935	·373	11
11½	19·699	2·449	22·148	3·265	17·250	1·633	13·576	·408	11½
12	20·889	2·667	23·556	3·556	18·222	1·778	14·222	·444	12
12½	22·106	2·894	25·000	3·859	19·213	1·929	14·873	·482	12½
13	23·352	3·129	26·481	4·173	20·222	2·086	15·528	·521	13
13½	24·625	3·375	28·000	4·500	21·250	2·250	16·187	·562	13½
14	25·926	3·630	29·556	4·839	22·296	2·419	16·852	·605	14
14½	27·255	3·894	31·148	5·191	23·361	2·596	17·521	·649	14½
15	28·611	4·167	32·778	5·556	24·444	2·778	18·194	·694	15
15½	29·995	4·449	34·444	5·933	25·546	2·966	18·873	·741	15½
16	31·407	4·741	36·148	6·321	26·667	3·161	19·556	·790	16
16½	32·847	5·042	37·889	6·723	27·806	3·361	20·243	·840	16½
17	34·315	5·352	39·667	7·136	28·963	3·568	20·935	·892	17
17½	35·810	5·671	41·481	7·562	30·139	3·781	21·632	·945	17½
18	37·333	6·000	43·333	8·000	31·333	4·000	22·333	1·000	18
18½	38·884	6·338	45·222	8·451	32·546	4·225	23·039	1·056	18½
19	40·463	6·685	47·148	8·913	33·778	4·457	23·750	1·114	19
19½	42·069	7·042	49·111	9·389	35·028	4·695	24·465	1·174	19½
20	43·704	7·407	51·111	9·877	36·296	4·939	25·185	1·235	20
20½	45·366	7·782	53·148	10·377	37·583	5·188	25·910	1·297	20½
21	47·056	8·167	55·222	10·889	38·889	5·444	26·639	1·361	21
21½	48·773	8·560	57·333	11·413	40·213	5·707	27·373	1·427	21½
22	50·519	8·963	59·481	11·951	41·556	5·975	28·111	1·494	22
22½	52·292	9·375	61·667	12·500	42·917	6·250	28·854	1·562	22½
23	54·093	9·796	63·889	13·061	44·296	6·531	29·602	1·633	23
23½	55·921	10·227	66·148	13·636	45·694	6·818	30·354	1·705	23½
24	57·778	10·667	68·444	14·222	47·111	7·111	31·111	1·778	24
24½	59·662	11·116	70·778	14·821	48·546	7·411	31·873	1·853	24½
25	61·574	11·574	73·148	15·432	50·000	7·716	32·639	1·929	25
25½	63·514	12·042	75·556	16·056	51·472	8·028	33·410	2·007	25½
26	65·481	12·518	78·000	16·691	52·963	8·347	34·185	2·086	26
26½	67·477	13·004	80·481	17·339	54·472	8·670	34·965	2·167	26½
27	69·500	13·500	83·000	18·000	56·000	9·000	35·750	2·250	27
27½	71·551	14·004	85·556	18·672	57·546	9·336	36·539	2·334	27½
28	73·630	14·518	88·148	19·357	59·111	9·679	37·333	2·420	28
28½	75·736	15·042	90·778	20·056	60·694	10·028	38·132	2·507	28½
29	77·870	15·574	93·444	20·765	62·296	10·383	38·935	2·596	29
29½	80·032	16·116	96·148	21·488	63·917	10·744	39·743	2·686	29½
30	82·222	16·667	98·889	22·222	65·556	11·111	40·556	2·778	30

TABLE XXIV.—Base 29 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
30½	84·440	17·227	101·667	22·970	67·213	11·485	41·373	2·871	30½
31	86·685	17·796	104·481	23·728	68·889	11·864	42·194	2·966	31
31½	88·958	18·375	107·333	24·500	70·583	12·250	43·021	3·062	31½
32	91·259	18·963	110·222	25·284	72·296	12·642	43·852	3·160	32
32½	93·588	19·560	113·148	26·080	74·028	13·040	44·687	3·260	32½
33	95·944	20·167	116·111	26·889	75·778	13·444	45·528	3·361	33
33½	98·329	20·782	119·111	27·709	77·546	13·855	46·373	3·464	33½
34	100·741	21·407	122·148	28·543	79·333	14·272	47·222	3·568	34
34½	103·181	22·042	125·222	29·389	81·139	14·694	48·076	3·674	34½
35	105·648	22·685	128·333	30·247	82·963	15·123	48·935	3·781	35
35½	108·143	23·338	131·481	31·117	84·806	15·559	49·799	3·890	35½
36	110·667	24·000	134·667	32·000	86·667	16·000	50·667	4·000	36
36½	113·218	24·671	137·889	32·895	88·546	16·447	51·539	4·112	36½
37	115·796	25·352	141·148	33·802	90·444	16·901	52·417	4·225	37
37½	118·403	26·042	144·444	34·722	92·361	17·361	53·299	4·340	37½
38	121·037	26·741	147·778	35·654	94·296	17·827	54·185	4·457	38
38½	123·699	27·449	151·148	36·599	96·250	18·299	55·076	4·575	38½
39	126·389	28·167	154·556	37·556	98·222	18·778	55·972	4·694	39
39½	129·106	28·894	158·000	38·525	100·213	19·263	56·873	4·816	39½
40	131·852	29·630	161·481	39·506	102 222	19·753	57·778	4·933	40
40½	134·625	30·375	165·000	40·500	104·250	20·250	58·687	5·062	40½
41	137·426	31·129	168·556	41·506	106·296	20·753	59·602	5·188	41
41½	140·255	31·894	172·148	42·525	108·361	21·263	60·521	5·316	41½
42	143·111	32·667	175·778	43·556	110·444	21·778	61·444	5·444	42
42½	145·995	33·449	179·444	44·599	112·546	22·299	62·373	5·575	42½
43	148·907	34·241	183·148	45·654	114·667	22·827	63·306	5·707	43
43½	151·847	35·042	186·889	46·722	116·806	23·361	64·243	5·840	43½
44	154·815	35·852	190·667	47·802	118·963	23·901	65·185	5·975	44
44½	157·810	36·671	194·481	48·895	121·139	24·447	66·132	6·112	44½
45	160·833	37·500	198·333	50·000	123·333	25·000	67·083	6·250	45
45½	163·884	38·338	202·222	51·117	125·546	25·559	68·039	6·390	45½
46	166·963	39·185	206·148	52·247	127·778	26·123	69·000	6·531	46
46½	170·069	40·042	210·111	53·389	130·028	26·694	69·965	6·673	46½
47	173·204	40·907	214·111	54·543	132·296	27·272	70·935	6·818	47
47½	176·366	41·782	218·148	55·709	134·583	27·855	71·910	6·964	47½
48	179·556	42·667	222·222	56·889	136·889	28·444	72·889	7·111	48
48½	182·773	43·560	226·333	58·080	139·213	29·040	73·873	7·260	48½
49	186·018	44·463	230·481	59·284	141·556	29·642	74·861	7·410	49
49½	189·292	45·375	234·667	60·500	143·917	30·250	75·854	7·562	49½
50	192·593	46·296	238·889	61·728	146·296	30·864	76·852	7·716	50
50½	195·921	47·227	243·148	62·970	148·694	31·485	77·854	7·871	50½
51	199·278	48·167	247·444	64·222	151·111	32·111	78·861	8·028	51
51½	202·662	49·116	251·778	65·488	153·546	32·744	79·873	8·186	51½
52	206·074	50·074	256·148	66·765	156·000	33·383	80·889	8·346	52
52½	209·514	51·042	260·556	68·056	158·472	34·028	81·910	8·507	52½
53	212·981	52·018	265·000	69·357	160·963	34·679	82·935	8·670	53
53½	216·477	53·004	269·481	70·672	163·472	35·336	83·965	8·834	53½
54	220·000	54·000	274·000	72·000	166·000	36·000	85·000	9·000	54
54½	223·551	55·004	278·556	73·339	168·546	36·670	86·039	9·167	54½
55	227·130	56·018	283·148	74·691	171·111	37·346	87·083	9·336	55
55½	230·736	57·042	287·778	76·056	173·694	38·028	88·132	9·507	55½
56	234·370	58·074	292·444	77·432	176·296	38·716	89·185	9·679	56
56½	238·032	59·116	297·148	78·821	178·917	39·411	90·243	9·853	56½
57	241·722	60·167	301·889	80·222	181·556	40·111	91·306	10·028	57
57½	245·440	61·227	306·667	81·636	184·213	40·818	92·373	10·204	57½
58	249·185	62·296	311·481	83·061	186·889	41·531	93·444	10·383	58
58½	252·958	63·375	316·333	84·500	189·583	42·250	94·521	10·563	58½
59	256·759	64·463	321·222	85·951	192·296	42·975	95·602	10·744	59
59½	260·588	65·560	326·148	87·413	195·028	43·707	96·687	10·927	59½
60	264·444	66·667	331·111	88·889	197·778	44·444	97·778	11·111	60

TABLE XXV.—Base 30 Feet.

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	·281	·001	·282	·002	¼	29·865	4·307	34·171	5·742
½	·570	·004	·574	·005	½	30·570	4·449	35·018	5·933
¾	·865	·010	·875	·014	¾	31·281	4·594	35·875	6·125
1	1·167	·018	1·185	·024	16	32·000	4·741	36·741	6·321
¼	1·476	·029	1·505	·039	¼	32·726	4·890	37·616	6·520
½	1·792	·042	1·833	·056	½	33·458	5·042	38·500	6·723
¾	2·115	·057	2·171	·076	¾	34·198	5·196	39·394	6·928
2	2·444	·074	2·518	·099	17	34·944	5·352	40·296	7·136
¼	2·781	·094	2·875	·125	¼	35·698	5·510	41·208	7·347
½	3·125	·116	3·241	·155	½	36·458	5·671	42·130	7·562
¾	3·476	·140	3·616	·187	¾	37·226	5·835	43·060	7·779
3	3·833	·167	4·000	·222	18	38·000	6·000	44·000	8·000
¼	4·198	·196	4·394	·261	¼	38·781	6·168	44·949	8·224
½	4·570	·227	4·796	·303	½	39·570	6·338	45·907	8·451
¾	4·948	·260	5·208	·347	¾	40·365	6·510	46·875	8·681
4	5·333	·296	5·630	·395	19	41·167	6·685	47·852	8·913
¼	5·726	·334	6·060	·446	¼	41·976	6·862	48·838	9·150
½	6·125	·375	6·500	·500	½	42·792	7·042	49·833	9·389
¾	6·531	·418	6·949	·557	¾	43·615	7·223	50·838	9·631
5	6·944	·463	7·407	·617	20	44·444	7·407	51·852	9·877
¼	7·365	·510	7·875	·681	¼	45·281	7·594	52·875	10·125
½	7·792	·560	8·352	·747	½	46·125	7·782	53·907	10·377
¾	8·226	·612	8·838	·816	¾	46·976	7·973	54·949	10·631
6	8·667	·667	9·333	·889	21	47·833	8·167	56·000	10·889
¼	9·115	·723	9·838	·965	¼	48·698	8·362	57·060	11·150
½	9·570	·782	10·352	1·044	½	49·570	8·560	58·130	11·413
¾	10·031	·844	10·875	1·125	¾	50·448	8·760	59·208	11·681
7	10·500	·907	11·407	1·209	22	51·333	8·963	60·296	11·951
¼	10·976	·973	11·949	1·298	¼	52·226	9·168	61·394	12·224
½	11·458	1·042	12·500	1·389	½	53·125	9·375	62·500	12·500
¾	11·948	1·112	13·060	1·483	¾	54·031	9·585	63·616	12·779
8	12·444	1·185	13·630	1·580	23	54·944	9·796	64·741	13·061
¼	12·948	1·260	14·208	1·681	¼	55·865	10·010	65·875	13·347
½	13·458	1·338	14·796	1·784	½	56·792	10·227	67·018	13·636
¾	13·976	1·418	15·394	1·890	¾	57·726	10·446	68·171	13·928
9	14·500	1·500	16·000	2·000	24	58·667	10·667	69·333	14·222
¼	15·031	1·584	16·616	2·113	¼	59·615	10·890	70·505	14·520
½	15·570	1·672	17·241	2·229	½	60·570	11·116	71·685	14·821
¾	16·115	1·760	17·875	2·347	¾	61·531	11·344	72·875	15·125
10	16·667	1·852	18·518	2·470	25	62·500	11·574	74·074	15·432
¼	17·226	1·946	19·171	2·594	¼	63·476	11·807	75·282	15·742
½	17·792	2·042	19·833	2·723	½	64·458	12·042	76·500	16·056
¾	18·365	2·140	20·505	2·853	¾	65·448	12·279	77·727	16·372
11	18·944	2·241	21·185	2·988	26	66·444	12·518	78·963	16·691
¼	19·531	2·344	21·875	3·125	¼	67·448	12·760	80·208	17·014
½	20·125	2·449	22·574	3·265	½	68·458	13·004	81·463	17·339
¾	20·726	2·557	23·282	3·409	¾	69·476	13·251	82·727	17·668
12	21·333	2·667	24·000	3·556	27	70·500	13·500	84·000	18·000
¼	21·948	2·779	24·727	3·705	¼	71·531	13·751	85·282	18·335
½	22·570	2·894	25·463	3·859	½	72·570	14·004	86·574	18·672
¾	23·198	3·010	26·208	4·014	¾	73·615	14·260	87·875	19·014
13	23·833	3·129	26·963	4·173	28	74·667	14·518	89·185	19·357
¼	24·476	3·251	27·727	4·335	¼	75·726	14·779	90·505	19·705
½	25·125	3·375	28·500	4·500	½	76·792	15·042	91·833	20·056
¾	25·781	3·501	29·282	4·668	¾	77·865	15·307	93·171	20·409
14	26·444	3·630	30·074	4·839	29	78·944	15·574	94·518	20·765
¼	27·115	3·760	30·875	5·014	¼	80·031	15·844	95·875	21·125
½	27·792	3·894	31·685	5·191	½	81·125	16·116	97·241	21·488
¾	28·476	4·029	32·505	5·372	¾	82·226	16·390	98·616	21·853
15	29·167	4·167	33·333	5·556	30	83·333	16·667	100·000	22·222

TABLE XXV.—Base 30 Feet.

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	84·448	16·946	101·394	22·594		164·031	37·918	201·949	50·557
	85·570	17·227	102·796	22·970		165·570	38·338	203·907	51·117
	86·698	17·510	104·208	23·347		167·115	38·760	205·875	51·681
31	87·833	17·796	105·630	23·728	46	168·667	39·185	207·852	52·247
	88·976	18·084	107·060	24·113		170·226	39·612	209·838	52·816
	90·125	18·375	108·500	24·500		171·792	40·042	211·833	53·389
	91·281	18·668	109·949	24·890		173·365	40·473	213·838	53·965
32	92·444	18·963	111·407	25·284	47	174·944	40·907	215·852	54·543
	93·615	19·260	112·875	25·681		176·531	41·344	217·875	55·125
	94·792	19·560	114·352	26·080		178·125	41·782	219·907	55·709
	95·976	19·862	115·838	26·483		179·726	42·223	221·949	56·298
33	97·167	20·167	117·333	26·889	48	181·333	42·667	224·000	56·889
	98·365	20·473	118·838	27·298		182·948	43·112	226·060	57·483
	99·570	20·782	120·352	27·709		184·570	43·560	228·130	58·080
	100·781	21·094	121·875	28·125		186·198	44·010	230·208	58·681
34	102·000	21·407	123·407	28·543	49	187·833	44·463	232·296	59·284
	103·226	21·723	124·949	28·965		189·476	44·918	234·394	59·890
	104·458	22·042	126·500	29·389		191·125	45·375	236·500	60·500
	105·698	22·362	128·060	29·816		192·781	45·834	238·616	61·113
35	106·944	22·685	129·630	30·247	50	194·444	46·296	240·741	61·728
	108·198	23·010	131·208	30·681		196·115	46·760	242·875	62·347
	109·458	23·338	132·796	31·117		197·792	47·227	245·018	62·970
	110·726	23·668	134·394	31·557		199·476	47·696	247·171	63·594
36	112·000	24·000	136·000	32·000	51	201·167	48·167	249·333	64·222
	113·281	24·334	137·616	32·446		202·865	48·640	251·505	64·853
	114·570	24·671	139·241	32·895		204·570	49·116	253·685	65·488
	115·865	25·010	140·875	33·347		206·281	49·594	255·875	66·125
37	117·167	25·352	142·518	33·802	52	208·000	50·074	258·074	66·765
	118·476	25·696	144·171	34·261		209·726	50·557	260·282	67·409
	119·792	26·042	145·833	34·722		211·458	51·042	262·500	68·056
	121·115	26·390	147·505	35·187		213·198	51·529	264·727	68·705
38	122·444	26·741	149·185	35·654	53	214·944	52·018	266·963	69·357
	123·781	27·094	150·875	36·125		216·698	52·510	269·208	70·014
	125·125	27·449	152·574	36·599		218·458	53·004	271·463	70·672
	126·476	27·807	154·282	37·076		220·226	53·501	273·727	71·335
39	127·833	28·167	156·000	37·556	54	222·000	54·000	276·000	72·000
	129·198	28·529	157·727	38·039		223·781	54·501	278·282	72·668
	130·570	28·894	159·463	38·525		225·570	55·004	280·574	73·339
	131·948	29·260	161·208	39·014		227·365	55·510	282·875	74·014
40	133·333	29·630	162·963	39·506	55	229·167	56·018	285·185	74·691
	134·726	30·001	164·727	40·002		230·976	56·529	287·505	75·372
	136·125	30·375	166·500	40·500		232·792	57·042	289·833	76·056
	137·531	30·751	168·282	41·002		234·615	57·557	292·171	76·742
41	138·944	31·129	170·074	41·506	56	236·444	58·074	294·518	77·432
	140·365	31·510	171·875	42·014		238·281	58·594	296·875	78·125
	141·792	31·894	173·685	42·525		240·125	59·116	299·241	78·821
	143·226	32·279	175·505	43·039		241·976	59·640	301·616	79·520
42	144·667	32·667	177·333	43·556	57	243·833	60·167	304·000	80·222
	146·115	33·057	179·171	44·076		245·698	60·696	306·394	80·928
	147·570	33·449	181·018	44·599		247·570	61·227	308·796	81·636
	149·031	33·844	182·875	45·125		249·448	61·760	311·208	82·347
43	150·500	34·241	184·741	45·654	58	251·333	62·296	313·630	83·061
	151·976	34·640	186·616	46·187		253·226	62·834	316·060	83·779
	153·458	35·042	188·500	46·722		255·125	63·375	318·500	84·500
	154·948	35·446	190·394	47·261		257·031	63·918	320·949	85·224
44	156·444	35·852	192·296	47·802	59	258·944	64·463	323·407	85·951
	157·948	36·260	194·208	48·347		260·865	65·010	325·875	86·681
	159·458	36·671	196·130	48·895		262·792	65·560	328·352	87·413
	160·976	37·085	198·060	49·446		264·726	66·112	330·838	88·150
45	162·500	37·500	200·000	50·000	60	266·667	66·667	333·333	88·889

TABLE XXV.—Base 30 Feet—*continued.*

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	·280	·001	·278	·000		25·558	2·871	19·098	·718
	·565	·003	·558	·001		26·120	2·966	19·447	·741
	·854	·007	·839	·002		26·687	3·063	19·797	·766
1	1·148	·012	1·120	·003	16	27·259	3·161	20·148	·790
	1·447	·019	1·403	·005		27·836	3·260	20·501	·815
	1·750	·028	1·687	·007		28·417	3·361	20·854	·840
	2·058	·038	1·973	·009		29·002	3·464	21·209	·866
2	2·370	·049	2·259	·012	17	29·592	3·568	21·565	·892
	2·687	·062	2·547	·016		30·187	3·674	21·922	·918
	3·009	·077	2·836	·019		30·787	3·781	22·280	·945
	3·336	·093	3·126	·023		31·391	3·890	22·639	·972
3	3·667	·111	3·417	·028	18	32·000	4·000	23·000	1·000
	4·002	·130	3·709	·033		32·613	4·112	23·362	1·028
	4·342	·151	4·002	·039		33·232	4·225	23·725	1·056
	4·687	·174	4·297	·043		33·854	4·340	24·089	1·085
4	5·037	·197	4·593	·049	19	34·481	4·457	24·454	1·114
	5·391	·223	4·889	·056		35·113	4·575	24·820	1·144
	5·750	·250	5·188	·062		35·750	4·695	25·187	1·174
	6·113	·279	5·487	·070		36·391	4·816	25·556	1·204
5	6·481	·309	5·787	·077	20	37·037	4·939	25·926	1·235
	6·854	·340	6·089	·085		37·687	5·063	26·297	1·266
	7·231	·374	6·391	093		38·342	5·188	26·669	1·297
	7·613	·408	6·695	·102		39·002	5·316	27·042	1·329
6	8·000	·444	7·000	·111	21	39·667	5·444	27·417	1·361
	8·391	·482	7·306	·121		40·336	5·575	27·792	1·394
	8·787	·522	7·613	·130		41·009	5·707	28·169	1·427
	9·187	·562	7·922	·141		41·687	5·840	28·547	1·460
7	9·592	·605	8·231	·151	22	42·370	5·975	28·926	1·494
	10·002	·649	8·542	·162		43·058	6·112	29·306	1·528
	10·417	·695	8·854	·174		43·750	6·250	29·687	1·562
	10·836	·742	9·167	·185		44·447	6·390	30·070	1·597
8	11·259	·790	9·481	·197	23	45·148	6·531	30·454	1·633
	11·687	·840	9·797	·210		45·854	6·674	30·839	1·668
	12·120	·892	10·113	·223		46·565	6·818	31·225	1·705
	12·558	·945	10·431	·236		47·280	6·964	31·612	1·741
9	13·000	1·000	10·750	·250	24	48·000	7·111	32·000	1·778
	13·447	1·056	11·070	·264		48·725	7·260	32·389	1·815
	13·898	1·115	11·391	·279		49·454	7·411	32·780	1·853
	14·354	1·174	11·714	·293		50·187	7·563	33·172	1·891
10	14·815	1·235	12·037	·309	25	50·926	7·716	33·565	1·929
	15·280	1·297	12·362	·324		51·669	7·871	33·959	1·968
	15·750	1·361	12·687	·340		52·417	8·028	34·354	2·007
	16·225	1·427	13·014	·357		53·169	8·186	34·751	2·046
11	16·704	1·494	13·343	·373	26	53·926	8·347	35·148	2·086
	17·187	1·562	13·672	·391		54·687	8·507	35·547	2·127
	17·676	1·633	14·002	·408		55·454	8·670	35·947	2·167
	18·169	1·704	14·334	·426		56·225	8·834	36·348	2·209
12	18·667	1·778	14·667	·444	27	57·000	9·000	36·750	2·250
	19·169	1·853	15·001	·463		57·780	9·167	37·153	2·292
	19·676	1·929	15·336	·482		58·565	9·336	37·558	2·334
	20·187	2·007	15·672	·502		59·354	9·507	37·964	2·377
13	20·704	2·086	16·009	·521	28	60·148	9·679	38·370	2·420
	21·225	2·167	16·348	·542		60·947	9·853	38·778	2·463
	21·750	2·250	16·687	·562		61·750	10·028	39·187	2·507
	22·280	2·334	17·028	·584		62·558	10·204	39·598	2·551
14	22·815	2·419	17·370	·605	29	63·370	10·383	40·009	2·596
	23·354	2·507	17·714	·627		64·187	10·563	40·422	2·641
	23·898	2·596	18·058	·649		65·009	10·744	40·836	2·686
	24·447	2·686	18·403	·671		65·836	10·927	41·251	2·732
15	25·000	2·778	18·750	·694	30	66·667	11·111	41·667	2·778

TABLE XXV.—Base 30 Feet—*continued.*

Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	67·502	11·297	42·084	2·824
	68·342	11·485	42·502	2·871
	69·187	11·674	42·922	2·918
31	70·037	11·864	43·343	2·966
	70·891	12·056	43·764	3·014
	71·750	12·250	44·187	3·062
	72·613	12·445	44·612	3·111
32	73·481	12·642	45·037	3·160
	74·354	12·840	45·464	3·210
	75·232	13·040	45·891	3·260
	76·113	13·242	46·320	3·310
33	77·000	13·444	46·750	3·361
	77·891	13·649	47·181	3·412
	78·787	13·855	47·613	3·464
	79·687	14·062	48·047	3·516
34	80·592	14·272	48·481	3·568
	81·502	14·482	48·917	3·621
	82·417	14·694	49·354	3·674
	83·336	14·908	49·792	3·727
35	84·259	15·123	50·231	3·781
	85·187	15·340	50·672	3·835
	86·120	15·559	51·113	3·890
	87·058	15·779	51·556	3·945
36	88·000	16·000	52·000	4·000
	88·947	16·223	52·445	4·056
	89·898	16·447	52·891	4·112
	90·854	16·674	53·339	4·168
37	91·815	16·901	53·787	4·225
	92·780	17·130	54·237	4·283
	93·750	17·361	54·688	4·340
	94·725	17·593	55·139	4·398
38	95·704	17·827	55·593	4·457
	96·687	18·062	56·047	4·516
	97·676	18·299	56·502	4·575
	98·669	18·538	56·959	4·634
39	99·667	18·778	57·417	4·694
	100·669	19·019	57·876	4·755
	101·676	19·263	58·336	4·816
	102·687	19·507	58·797	4·877
40	103·704	19·753	59·259	4·938
	104·725	20·001	59·723	5·000
	105·750	20·250	60·187	5·062
	106·780	20·501	60·653	5·125
41	107·815	20·753	61·120	5·188
	108·854	21·007	61·589	5·252
	109·898	21·263	62·058	5·316
	110·947	21·519	62·528	5·380
42	112·000	21·778	63·000	5·444
	113·058	22·038	63·473	5·509
	114·120	22·299	63·947	5·575
	115·187	22·563	64·422	5·641
43	116·259	22·827	64·898	5·707
	117·336	23·093	65·376	5·773
	118·417	23·361	65·854	5·840
	119·502	23·630	66·334	5·908
44	120·592	23·901	66·815	5·975
	121·687	24·174	67·297	6·043
	122·787	24·447	67·780	6·112
	123·891	24·723	68·264	6·181
45	125·000	25·000	68·750	6·250

Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	126·113	25·279	69·237	6·320
	127·232	25·559	69·725	6·390
	128·354	25·840	70·214	6·460
46	129·481	26·123	70·704	6·531
	130·613	26·408	71·195	6·602
	131·750	26·694	71·687	6·673
	132·891	26·982	72·181	6·746
47	134·037	27·272	72·676	6·818
	135·187	27·563	73·172	6·891
	136·342	27·855	73·669	6·964
	137·502	28·149	74·167	7·037
48	138·667	28·444	74·667	7·111
	139·836	28·742	75·167	7·185
	141·009	29·040	75·669	7·260
	142·187	29·340	76·172	7·335
49	143·370	29·642	76·676	7·410
	144·558	29·945	77·181	7·486
	145·750	30·250	77·687	7·562
	146·947	30·556	78·195	7·639
50	148·148	30·864	78·704	7·716
	149·354	31·174	79·214	7·793
	150·565	31·485	79·725	7·871
	151·780	31·797	80·237	7·949
51	153·000	32·111	80·750	8·028
	154·225	32·427	81·264	8·107
	155·454	32·744	81·780	8·186
	156·687	33·063	82·297	8·266
52	157·926	33·383	82·815	8·346
	159·169	33·704	83·334	8·426
	160·417	34·028	83·854	8·507
	161·669	34·353	84·376	8·588
53	162·926	34·679	84·898	8·670
	164·187	35·007	85·422	8·752
	165·454	35·336	85·947	8·834
	166·725	35·667	86·473	8·917
54	168·000	36·000	87·000	9·000
	169·280	36·334	87·528	9·084
	170·565	36·670	88·058	9·167
	171·854	37·007	88·589	9·252
55	173·148	37·346	89·120	9·336
	174·447	37·686	89·653	9·421
	175·750	38·028	90·187	9·507
	177·058	38·371	90·723	9·593
56	178·370	38·716	91·259	9·679
	179·687	39·063	91·797	9·766
	181·009	39·411	92·336	9·853
	182·336	39·760	92·876	9·940
57	183·667	40·111	93·417	10·028
	185·002	40·464	93·959	10·116
	186·342	40·818	94·502	10·204
	187·687	41·174	95·047	10·293
58	189·037	41·531	95·593	10·383
	190·391	41·890	96·139	10·472
	191·750	42·250	96·688	10·563
	193·113	42·612	97·237	10·653
59	194·481	42·975	97·787	10·744
	195·854	43·340	98·339	10·835
	197·232	43·707	98·891	10·927
	198·613	44·075	99·445	11·019
60	200·000	44·444	100·000	11·111

TABLE XXVI.—Base 31 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·588	·004	·593	·005	·583	·003	·576	·001	½
1	1·204	·018	1·222	·024	1·185	·012	1·157	·003	1
1½	1·847	·042	1·889	·056	1·806	·028	1·743	·007	1½
2	2·518	·074	2·593	·099	2·444	·049	2·333	·012	2
2½	3·218	·116	3·333	·155	3·102	·077	2·928	·019	2½
3	3·944	·167	4·111	·222	3·778	·111	3·528	·028	3
3½	4·699	·227	4·926	·303	4·472	·151	4·132	·039	3½
4	5·481	·296	5·778	·395	5·185	·197	4·741	·049	4
4½	6·292	·375	6·667	·500	5·917	·250	5·354	·062	4½
5	7·130	·463	7·593	·617	6·667	·309	5·972	·077	5
5½	7·995	·560	8·556	·747	7·435	·374	6·595	·093	5½
6	8·889	·667	9·556	·889	8·222	·444	7·222	·111	6
6½	9·810	·782	10·593	1·044	9·028	·522	7·854	·130	6½
7	10·759	·907	11·667	1·209	9·852	·605	8·491	·151	7
7½	11·736	1·042	12·778	1·389	10·694	·695	9·132	·174	7½
8	12·741	1·185	13·926	1·580	11·556	·790	9·778	·197	8
8½	13·773	1·338	15·111	1·784	12·435	·892	10·428	·223	8½
9	14·833	1·500	16·333	2·000	13·333	1·000	11·083	·250	9
9½	15·921	1·672	17·593	2·229	14·250	1·115	11·743	·279	9½
10	17·037	1·852	18·889	2·470	15·185	1·235	12·407	·309	10
10½	18·181	2·042	20·222	2·723	16·139	1·361	13·076	·340	10½
11	19·352	2·241	21·593	2·988	17·111	1·494	13·750	·373	11
11½	20·551	2·449	23·000	3·265	18·102	1·633	14·428	·408	11½
12	21·778	2·667	24·444	3·556	19·111	1·778	15·111	·444	12
12½	23·032	2·894	25·926	3·859	20·139	1·929	15·799	·482	12½
13	24·315	3·129	27·444	4·173	21·185	2·086	16·491	·521	13
13½	25·625	3·375	29·000	4·500	22·250	2·250	17·187	·562	13½
14	26·963	3·630	30·593	4·839	23·333	2·419	17·889	·605	14
14½	28·329	3·894	32·222	5·191	24·435	2·596	18·595	·649	14½
15	29·722	4·167	33·889	5·556	25·556	2·778	19·306	·694	15
15½	31·143	4·449	35·593	5·933	26·694	2·966	20·021	·741	15½
16	32·593	4·741	37·333	6·321	27·852	3·161	20·741	·790	16
16½	34·069	5·042	39·111	6·723	29·028	3·361	21·465	·840	16½
17	35·574	5·352	40·926	7·136	30·222	3·568	22·194	·892	17
17½	37·106	5·671	42·778	7·562	31·435	3·781	22·928	·945	17½
18	38·667	6·000	44·667	8·000	32·667	4·000	23·667	1·000	18
18½	40·255	6·338	46·593	8·451	33·917	4·225	24·410	1·056	18½
19	41·870	6·685	48·556	8·913	35·185	4·457	25·157	1·114	19
19½	43·514	7·042	50·556	9·389	36·472	4·695	25·910	1·174	19½
20	45·185	7·407	52·593	9·877	37·778	4·939	26·667	1·235	20
20½	46·884	7·782	54·667	10·377	39·102	5·188	27·428	1·297	20½
21	48·611	8·167	56·778	10·889	40·444	5·444	28·194	1·361	21
21½	50·366	8·560	58·926	11·413	41·806	5·707	28·965	1·427	21½
22	52·148	8·963	61·111	11·951	43·185	5·975	29·741	1·494	22
22½	53·958	9·375	63·333	12·500	44·583	6·250	30·521	1·562	22½
23	55·796	9·796	65·593	13·061	46·000	6·531	31·306	1·633	23
23½	57·662	10·227	67·889	13·636	47·435	6·818	32·095	1·705	23½
24	59·556	10·667	70·222	14·222	48·889	7·111	32·889	1·778	24
24½	61·477	11·116	72·593	14·821	50·361	7·411	33·687	1·853	24½
25	63·426	11·574	75·000	15·432	51·852	7·716	34·491	1·929	25
25½	65·403	12·042	77·444	16·056	53·361	8·028	35·299	2·007	25½
26	67·407	12·518	79·926	16·691	54·889	8·347	36·111	2·086	26
26½	69·440	13·004	82·444	17·339	56·435	8·670	36·928	2·167	26½
27	71·500	13·500	85·000	18·000	58·000	9·000	37·750	2·250	27
27½	73·588	14·004	87·593	18·672	59·583	9·336	38·576	2·334	27½
28	75·704	14·518	90·222	19·357	61·185	9·679	39·407	2·420	28
28½	77·847	15·042	92·889	20·056	62·806	10·028	40·243	2·507	28½
29	80·018	15·574	95·593	20·765	64·444	10·383	41·083	2·596	29
29½	82·218	16·116	98·333	21·488	66·102	10·744	41·928	2·686	29½
30	84·444	16·667	101·111	22·222	67·778	11·111	42·778	2·778	30

TABLE XXXII.—Base 38 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
30½	94·607	17·227	111·833	22·970	77·380	11·485	51·539	2·871	30½
31	97·018	17·796	114·815	23·728	79·222	11·864	52·528	2·966	31
31½	99·459	18·375	117·833	24·500	81·084	12·250	53·521	3·062	31½
32	101·926	18·963	120·889	25·284	82·963	12·642	54·519	3·160	32
32½	104·422	19·560	123·981	26·080	84·862	13·040	55·521	3·260	32½
33	106·944	20·167	127·111	26·889	86·778	13·444	56·528	3·361	33
33½	109·495	20·782	130·278	27·709	88·713	13·855	57·539	3·464	33½
34	112·074	21·407	133·481	28·543	90·667	14·272	58·556	3·568	34
34½	114·680	22·042	136·722	29·389	92·639	14·694	59·576	3·674	34½
35	117·315	22·685	140·000	30·247	94·630	15·123	60·602	3·781	35
35½	119·977	23·338	143·315	31·117	96·639	15·559	61·632	3·890	35½
36	122·667	24·000	146·667	32·000	98·667	16·000	62·667	4·000	36
36½	125·384	24·671	150·056	32·895	100·713	16·447	63·706	4·112	36½
37	128·130	25·352	153·481	33·802	102·778	16·901	64·750	4·225	37
37½	130·903	26·042	156·944	34·722	104·862	17·361	65·799	4·340	37½
38	133·703	26·741	160·444	35·654	106·963	17·827	66·852	4·457	38
38½	136·533	27·449	163·981	36·599	109·084	18·299	67·910	4·575	38½
39	139·389	28·167	167·556	37·556	111·222	18·778	68 972	4·694	39
39½	142·274	28·894	171·167	38·525	113·380	19·263	70·039	4·816	39½
40	145·185	29·630	174·815	39·506	115·556	19·753	71·111	4·938	40
40½	148·125	30·375	178·500	40·500	117·750	20·250	72·187	5·062	40½
41	151·092	31·129	182·222	41·506	119·963	20·753	73·268	5·188	41
41½	154·088	31·894	185·981	42·525	122·194	21·263	74·354	5·316	41½
42	157·111	32·667	189·778	43·556	124·444	21·778	75·444	5·444	42
42½	160·162	33·449	193·611	44·599	126·713	22·299	76·539	5·575	42½
43	163·240	34·241	197·481	45·654	129·000	22·827	77·639	5·707	43
43½	166·347	35·042	201·389	46·722	131·306	23·361	78·743	5·840	43½
44	169·482	35·852	205·333	47·802	133·630	23·901	79·852	5·975	44
44½	172·643	36·671	209·315	48·895	135·972	24·447	80·965	6·112	44½
45	175·833	37·500	213·333	50·000	138·333	25·000	82·083	6·250	45
45½	179·051	38·338	217·389	51·117	140·713	25·559	83·206	6·390	45½
46	182·296	39·185	221·481	52·247	143·111	2C·123	84·333	6·531	46
46½	185·569	40·042	225·611	53·389	145·528	26·694	85·465	6·673	46½
47	188·870	40·907	229·778	54·543	147·963	27·272	86·602	6·818	47
47½	192·200	41·782	233·981	55·709	150·417	27·855	87·743	6·964	47½
48	195·556	42·667	238·222	56·889	152·889	28·444	88·889	7·111	48
48½	198·939	43·560	242·500	58·080	155·379	29·040	90·039	7·260	48½
49	202·352	44·463	246·815	59·284	157·889	29·642	91·194	7·410	49
49½	205·792	45·375	251·167	60·500	160·417	30·250	92·354	7·562	49½
50	209·259	46·296	255·556	61·728	162·963	30·864	93·519	7·716	50
50½	212·755	47·227	259·981	62·970	165·528	31·485	94·687	7·871	50½
51	216·278	48·167	264·444	64·222	168·111	32·111	95·861	8·028	51
51½	219·829	49·116	268·944	65·488	170·713	32·744	97·039	8·186	51½
52	223·407	50·074	273·481	66·765	173·333	33·383	98·222	8·346	52
52½	227·014	51·042	278·056	68·056	175·972	34·028	99·410	8·507	52½
53	230·648	52·018	282·667	69·357	178·630	34·679	100·602	8·670	53
53½	234·310	53·004	287·315	70·672	181·306	35·336	101·799	8·834	53½
54	238·000	54·000	292·000	72·000	184·000	36·000	103·000	9·000	54
54½	241·718	55·004	296·722	73·339	186·713	36·670	104·206	9·167	54½
55	245·463	56·018	301·481	74·691	189·444	37·346	105·417	9·336	55
55½	249·236	57·042	306·278	76·056	192·194	38·028	106·632	9·507	55½
56	253·037	58·074	311·111	77·432	194·963	38·716	107·852	9·679	56
56½	256·866	59·116	315·981	78·821	197·750	39·411	109·076	9·853	56½
57	260·722	60·167	320·889	80·222	200·556	40·111	110·306	10·028	57
57½	264·607	61·227	325·833	81·636	203·380	40·818	111·539	10·204	57½
58	268·518	62·296	330·815	83·061	206·222	41·531	112·778	10·383	58
58½	272·459	63·375	335·833	84·500	209·084	42·250	114·021	10·563	58½
59	276·426	64·463	340·889	85·951	211·963	42·975	115·268	10·744	59
59½	280·422	65·560	345·981	87·413	214·862	43·707	116·521	10·927	59½
60	284·444	66·667	351·111	88·889	217·778	44·444	117·778	11·111	60

TABLE XXVII.—Base 32 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·606	·004	·611	·005	·602	·003	·595	·001	½
1	1·241	·018	1·259	·024	1·222	·012	1·194	·003	1
1½	1·903	·042	1·944	·056	1·861	·028	1·799	·007	1½
2	2·593	·074	2·667	·099	2·518	·049	2·407	·012	2
2½	3·310	·116	3·426	·155	3·194	·077	3·021	·019	2½
3	4·056	·167	4·222	·222	3·889	·111	3·639	·028	3
3½	4·829	·227	5·056	·303	4·602	·151	4·262	·039	3½
4	5·630	·296	5·926	·395	5·333	·197	4·889	·049	4
4½	6·458	·375	6·833	·500	6·083	·250	5·521	·062	4½
5	7·315	·463	7·778	·617	6·852	·309	6·157	·077	5
5½	8·199	·560	8·759	·747	7·639	·374	6·799	·093	5½
6	9·111	·667	9·778	·889	8·444	·444	7·444	·111	6
6½	10·051	·782	10·833	1·044	9·268	·522	8·095	·130	6½
7	11·018	·907	11·926	1·209	10·111	·605	8·750	·151	7
7½	12·014	1·042	13·056	1·389	10·972	·695	9·410	·174	7½
8	13·037	1·185	14·222	1·580	11·852	·790	10·074	·197	8
8½	14·088	1·338	15·426	1·784	12·750	·892	10·743	·223	8½
9	15·167	1·500	16·667	2·000	13·667	1·000	11·417	·250	9
9½	16·273	1·672	17·944	2·229	14·602	1·115	12·095	·279	9½
10	17·407	1·852	19·259	2·470	15·556	1·235	12·778	·309	10
10½	18·569	2·042	20·611	2·723	16·528	1·361	13·465	·340	10½
11	19·759	2·241	22·000	2·988	17·518	1·494	14·157	·373	11
11½	20·977	2·449	23·426	3·265	18·528	1·633	14·854	·408	11½
12	22·222	2·667	24·889	3·556	19·556	1·778	15·556	·444	12
12½	23·495	2·894	26·389	3·859	20·602	1·929	16·262	·482	12½
13	24·796	3·129	27·926	4·173	21·667	2·086	16·972	·521	13
13½	26·125	3·375	29·500	4·500	22·750	2·250	17·687	·562	13½
14	27·481	3·630	31·111	4·839	23·852	2·419	18·407	·605	14
14½	28·866	3·894	32·759	5·191	24·972	2·596	19·132	·649	14½
15	30·278	4·167	34·444	5·556	26·111	2·778	19·861	·694	15
15½	31·718	4·449	36·167	5·933	27·268	2·966	20·595	·741	15½
16	33·185	4·741	37·926	6 321	28·444	3·161	21·333	·790	16
16½	34·681	5·042	39·722	6·723	29·639	3·361	22·076	·840	16½
17	36·204	5·352	41·556	7·136	30·852	3·568	22·824	·892	17
17½	37·755	5·671	43·426	7·562	32·083	3·781	23·576	·945	17½
18	39·333	6·000	45·333	8·000	33·333	4·000	24·333	1·000	18
18½	40·940	6·338	47·278	8·451	34·602	4·225	25·095	1·056	18½
19	42·574	6·685	49·259	8·913	35·889	4·457	25·861	1·114	19
19½	44·236	7·042	51·278	9·389	37·194	4·695	26·632	1·174	19½
20	45·926	7·407	53·333	9·877	38·518	4·939	27·407	1·235	20
20½	47·643	7·782	55·426	10·377	39·861	5·188	28·187	1·297	20½
21	49·389	8·167	57·556	10 889	41·222	5·444	28·972	1·361	21
21½	51·162	8·560	59·722	11·413	42·602	5·707	29·762	1·427	21½
22	52·963	8·963	61·926	11·951	44·000	5·975	30·556	1·494	22
22½	54·792	9·375	64·167	12·500	45·417	6·250	31·354	1·562	22½
23	56·648	9·796	66·444	13·061	46·852	6·531	32·157	1·633	23
23½	58·532	10·227	68·759	13·636	48·306	6·818	32·965	1·705	23½
24	60·444	10·667	71·111	14·222	49·778	7·111	33·778	1·778	24
24½	62·384	11·116	73·500	14·821	51·268	7·411	34·595	1·853	24½
25	64·352	11·574	75·926	15·432	52·778	7·716	35·417	1·929	25
25½	66·347	12·042	78·389	16·056	54·306	8·028	36·243	2·007	25½
26	68·370	12·518	80·889	16·691	55·852	8·347	37·074	2·086	26
26½	70·421	13·004	83·426	17·339	57·417	8·670	37·910	2·167	26½
27	72·500	13·500	86·000	18·000	59·000	9·000	38·750	2·250	27
27½	74·606	14·004	88·611	18·672	60·602	9·336	39·595	2·334	27½
28	76·741	14·518	91·259	19·357	62·222	9·679	40·444	2·420	28
28½	78·903	15·042	93·944	20·056	63·861	10·028	41·299	2·507	28½
29	81·093	15·574	96·667	20·765	65·518	10·383	42·157	2·596	29
29½	83·310	16·116	99·426	21·488	67·194	10·744	43·021	2·686	29½
30	85·556	16·667	102·222	22·222	68·889	11·111	43·889	2·778	30

TABLE XXVII.—Base 32 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
30½	87·829	17·227	105·056	22·970	70·602	11·485	44·762	2·871	30½
31	90·130	17·796	107·926	23·728	72·333	11·864	45·639	2·966	31
31½	92·458	18·375	110·833	24·500	74·083	12·250	46·521	3·062	31½
32	94·815	18·963	113·778	25·284	75·852	12·642	47·407	3·160	32
32½	97·199	19·560	116 759	26·080	77·639	13·040	48·299	3·260	32½
33	99·611	20·167	119·778	26·889	79·444	13·444	49·194	3·361	33
33½	102·051	20·782	122·833	27·709	81·268	13·855	50·095	3·464	33½
34	104·518	21·407	125·926	28·543	83·111	14·272	51·000	3·568	34
34½	107·014	22·042	129·056	29·389	84·972	14·694	51·910	3·674	34½
35	109·537	22·685	132·222	30·247	86·852	15·123	52·824	3·781	35
35½	112·088	23·338	135·426	31·117	88·750	15·559	53·743	3·890	35½
36	114·667	24·000	138·667	32·000	90·667	16·000	54·667	4·000	36
36½	117·273	24·671	141·944	32·895	92·602	16·447	55·595	4·112	36½
37	119·907	25·352	145·259	33·802	94·556	16·901	56·528	4·225	37
37½	122·569	26·042	148·611	34·722	96·528	17·361	57·465	4·340	37½
38	125·259	26·741	152·000	35·654	98·518	17·827	58·407	4·457	38
38½	127·977	27·449	155·426	36·599	100·528	18·299	59·354	4·575	38½
39	130·722	28·167	158·889	37·556	102·556	18·778	60·306	4·694	39
39½	133·495	28·894	162·389	38·525	104·602	19·263	61·262	4·816	39½
40	136·296	29·630	165·926	39·506	106·667	19·753	62·222	4·938	40
40½	139·125	30·375	169·500	40·500	108·750	20·250	63·187	5·062	40½
41	141·981	31·129	173·111	41·506	110·852	20·753	64·157	5·188	41
41½	144·866	31·894	176·759	42·525	112·972	21·263	65·132	5·316	41½
42	147·778	32·667	180·444	43·556	115·111	21·778	66·111	5·444	42
42½	150·718	33·449	184·167	44·599	117·268	22·299	67·095	5·575	42½
43	153·685	34·241	187·926	45·654	119·444	22·827	68·083	5·707	43
43½	156·681	35·042	191·722	46·722	121·639	23·361	69·076	5·840	43½
44	159·704	35·852	195·556	47·802	123·852	23·901	70·074	5·975	44
44½	162·755	36·671	199·426	48·895	126·083	24·447	71·076	6·112	44½
45	165·833	37·500	203·333	50·000	128·333	25·000	72·083	6·250	45
45½	168·940	38·338	207·278	51·117	130·602	25·559	73·095	6·390	45½
46	172·074	39·185	211·259	52·247	132·889	26·123	74·111	6·531	46
46½	175·236	40·042	215·278	53·389	135·194	26·694	75·132	6·673	46½
47	178·426	40·907	219·333	54·543	137·518	27·272	76·157	6·818	47
47½	181·644	41·782	223·426	55·709	139·861	27·855	77·187	6·964	47½
48	184·889	42·667	227·556	56·889	142·222	28·444	78·222	7·111	48
48½	188·162	43·560	231·722	58·080	144·602	29·040	79·262	7·260	48½
49	191·463	44·463	235·926	59·284	147·000	29·642	80·306	7·410	49
49½	194·792	45·375	240·167	60·500	149·417	30·250	81·354	7·562	49½
50	198·148	46·296	244·444	61·728	151·852	30·864	82·407	7·716	50
50½	201·532	47·227	248·759	62·970	154·306	31·485	83·465	7·871	50½
51	204·944	48·167	253·111	64·222	156·778	32·111	84·528	8·028	51
51½	208·384	49·116	257·500	65·488	159·268	32·744	85·595	8·186	51½
52	211·852	50·074	261·926	66·765	161·778	33·383	86·667	8·346	52
52½	215·347	51·042	266·389	68·056	164·306	34·028	87·743	8·507	52½
53	218·870	52·018	270·889	69·357	166·852	34·679	88·824	8·670	53
53½	222·421	53·004	275·426	70·672	169·417	35·336	89·910	8·834	53½
54	226·000	54·000	280·000	72·000	172·000	36·000	91·000	9·000	54
54½	229·606	55·004	284·611	73·339	174·602	36·670	92·095	9·167	54½
55	233·241	56·018	289·259	74·691	177·222	37·346	93·194	9·336	55
55½	236·903	57·042	293·944	76·056	179·861	38·028	94·299	9·507	55½
56	240·593	58·074	298·667	77·432	182·518	38·716	95·407	9·679	56
56½	244·310	59·116	303·426	78·821	185·194	39·411	96·521	9·853	56½
57	248·056	60·167	308·222	80·222	187·889	40·111	97·639	10·028	57
57½	251·829	61·227	313·056	81·636	190·602	40·818	98·762	10·204	57½
58	255·630	62·296	317·926	83·061	193·333	41·531	99·889	10·383	58
58½	259·458	63·375	322·833	84·500	196·083	42·250	101·021	10·563	58½
59	263·315	64·463	327·778	85·951	198·852	42·975	102·157	10·744	59
59½	267·199	65·560	332·759	87·413	201·639	43·707	103·299	10·927	59½
60	271·111	66·667	337·778	88·889	204·444	44·444	104·444	11·111	60

TABLE XXVIII.—Base 33 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·625	·004	·629	·005	·620	·003	·613	·001	½
1	1·278	·018	1·296	·024	1·259	·012	1·231	·003	1
1½	1·958	·042	2·000	·056	1·917	·028	1·854	·007	1½
2	2·667	·074	2·741	·099	2·593	·049	2·481	·012	2
2½	3·403	·116	3·519	·155	3·287	·077	3·113	·019	2½
3	4·167	·167	4·333	·222	4·000	·111	3·750	·028	3
3½	4·958	·227	5·185	·303	4·731	·151	4·391	·039	3½
4	5·778	·296	6·074	·395	5·481	·197	5·037	·049	4
4½	6·625	·375	7·000	·500	6·250	·250	5·687	·062	4½
5	7·500	·463	7·963	·617	7·037	·309	6·343	·077	5
5½	8·403	·560	8·963	·747	7·843	·374	7·002	·093	5½
6	9·333	·667	10·000	·889	8·667	·444	7·667	·111	6
6½	10·291	·782	11·074	1·044	9·509	·522	8·336	·130	6½
7	11·278	·907	12·185	1·209	10·370	·605	9·009	·151	7
7½	12·291	1·042	13·333	1·389	11·250	·695	9·687	·174	7½
8	13·333	1·185	14·519	1·580	12·148	·790	10·370	·197	8
8½	14·403	1·338	15·741	1·784	13·065	·892	11·058	·223	8½
9	15·500	1·500	17·000	2·000	14·000	1·000	11·750	·250	9
9½	16·625	1·672	18·296	2·229	14·954	1·115	12·447	·279	9½
10	17·778	1·852	19·629	2·470	15·926	1·235	13·148	·309	10
10½	18·958	2·042	21·000	2·723	16·917	1·361	13·854	·340	10½
11	20·167	2·241	22·407	2·988	17·926	1·494	14·565	·373	11
11½	21·403	2·449	23·852	3·265	18·954	1·633	15·280	·408	11½
12	22·667	2·667	25·333	3·556	20·000	1·778	16·000	·444	12
12½	23·958	2·894	26·852	3·859	21·065	1·929	16·725	·482	12½
13	25·278	3·129	28·407	4·173	22·148	2·086	17·454	·521	13
13½	26·625	3·375	30·000	4·500	23·250	2·250	18·187	·562	13½
14	28·000	3·630	31·629	4·839	24·370	2·419	18·926	·605	14
14½	29·403	3·894	33·296	5·191	25·509	2·596	19·669	·649	14½
15	30·833	4·167	35·000	5·556	26·667	2·778	20·417	·694	15
15½	32·291	4·449	36·741	5·933	27·843	2·966	21·169	·741	15½
16	33·778	4·741	38·519	6·321	29·037	3·161	21·926	·790	16
16½	35·291	5·042	40·333	6·723	30·250	3·361	22·687	·840	16½
17	36·833	5·352	42·185	7·136	31·481	3·568	23·454	·892	17
17½	38·403	5·671	44·074	7·562	32·731	3·781	24·225	·945	17½
18	40·000	6·000	46·000	8·000	34·000	4·000	25·000	1·000	18
18½	41·625	6·338	47·963	8·451	35·287	4·225	25·780	1·056	18½
19	43·278	6·685	49·963	8·913	36·593	4·457	26·565	1·114	19
19½	44·958	7·042	52·000	9·389	37·917	4·695	27·354	1·174	19½
20	46·667	7·407	54·074	9·877	39·259	4·939	28·148	1·235	20
20½	48·403	7·782	56·185	10·377	40·620	5·188	28·947	1·297	20½
21	50·167	8·167	58·333	10·889	42·000	5·444	29·750	1·361	21
21½	51·958	8·560	60·519	11·413	43·398	5·707	30·558	1·427	21½
22	53·778	8·963	62·741	11·951	44·815	5·975	31·370	1·494	22
22½	55·625	9·375	65·000	12·500	46·250	6·250	32·187	1·562	22½
23	57·500	9·796	67·296	13·061	47·704	6·531	33·009	1·633	23
23½	59·403	10·227	69·629	13·636	49·176	6·818	33·836	1·705	23½
24	61·333	10·667	72·000	14·222	50·667	7·111	34·667	1·778	24
24½	63·291	11·116	74·407	14·821	52·176	7·411	35·502	1·853	24½
25	65·278	11·574	76·852	15·432	53·704	7·716	36·343	1·929	25
25½	67·291	12·042	79·333	16·056	55·250	8·028	37·187	2·007	25½
26	69·333	12·518	81·852	16·691	56·815	8·347	38·037	2·086	26
26½	71·403	13·004	84·407	17·339	58·398	8·670	38·891	2·167	26½
27	73·500	13·500	87·000	18·000	60·000	9·000	39·750	2·250	27
27½	75·625	14·004	89·629	18·672	61·620	9·336	40·613	2·334	27½
28	77·778	14·518	92·296	19·357	63·259	9·679	41·481	2·420	28
28½	79·958	15·042	95·000	20·056	64·917	10·028	42·354	2·507	28½
29	82·167	15·574	97·741	20·765	66·593	10·383	43·231	2·596	29
29½	84·403	16·116	100·519	21·488	68·287	10·744	44·113	2·686	29½
30	86·667	16·667	103·333	22·222	70·000	11·111	45·000	2·778	30

TABLE XXVIII.—Base 33 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
30½	88·958	17·227	106·185	22·970	71·731	11·485	45·891	2·871	30½
31	91·278	17·796	109·074	23·728	73·481	11·864	46·787	2·966	31
31½	93·625	18·375	112·000	24·500	75·250	12·250	47·687	3·062	31½
32	96·000	18·963	114·963	25·284	77·037	12·642	48·593	3·160	32
32½	98·403	19·560	117·963	26·080	78·843	13·040	49·502	3·260	32½
33	100·833	20·167	121·000	26·889	80·667	13·444	50·417	3·361	33
33½	103·291	20·782	124·074	27·709	82·509	13·855	51·336	3·464	33½
34	105·778	21·407	127·185	28·543	84·370	14·272	52·259	3·568	34
34½	108·291	22·042	130·333	29·389	86·250	14·694	53·187	3·674	34½
35	110·833	22·685	133·519	30·247	88·148	15·123	54·120	3·781	35
35½	113·403	23·358	136·741	31·117	90·065	15·559	55·058	3·890	35½
36	116·000	24·000	140·000	32·000	92·000	16·000	56·000	4·000	36
36½	118·625	24·671	143·296	32·895	93·954	16·447	56·947	4·112	36½
37	121·278	25·352	146·629	33·802	95·926	16·901	57·898	4·225	37
37½	123·958	26·042	150·000	34·722	97·917	17·361	58·854	4·340	37½
38	126·667	26·741	153·407	35·654	99·926	17·827	59·815	4·457	38
38½	129·403	27·449	156·852	36·599	101·954	18·299	60·780	4·575	38½
39	132·167	28·167	160 333	37·556	104·000	18·778	61·750	4·694	39
39½	134·958	28·894	163·852	38·525	106 065	19·263	62·725	4·816	39½
40	137·778	29·630	167·407	39·506	108·148	19·753	63 704	4·938	40
40½	140·625	30·375	171·000	40·500	110·250	20·250	64·687	5·062	40½
41	143·500	31·129	174·629	41·506	112·370	20·753	65·676	5·188	41
41½	146·403	31·894	178·296	42·525	114·509	21·263	66·669	5·316	41½
42	149·333	32·667	182·000	43·556	116·667	21·778	67·667	5·444	42
42½	152·291	33·449	185·741	44·599	118·843	22·299	68·669	5·575	42½
43	155·278	34·241	189·519	45·654	121·037	22·827	69·676	5·707	43
43½	158·291	35·042	193·333	46·722	123·250	23·361	70·687	5·840	43½
44	161·333	35·852	197·185	47·802	125·481	23·901	71·704	5·975	44
44½	164·403	36·671	201·074	48·895	127·731	24·447	72·725	6·112	44½
45	167·500	37·500	205·000	50·000	130·000	25·000	73·750	6·250	45
45½	170·625	38·338	208·963	51·117	132·287	25·559	74·780	6·390	45½
46	173·778	39·185	212·963	52·247	134·593	26·123	75·815	6·531	46
46½	176·958	40·042	217·000	53·389	136·917	26·694	76·854	6·673	46½
47	180·167	40·907	221·074	54·543	139 259	27·272	77·898	6·818	47
47½	183·403	41·782	225·185	55·709	141·620	27·855	78·947	6·964	47½
48	186·667	42·667	229·333	56·889	144·000	28·444	80·000	7·111	48
48½	189·958	43·560	233·519	58·080	146·398	29·040	81·058	7·260	48½
49	193·278	44·463	237·741	59·284	148·815	29·642	82·120	7·410	49
49½	196·625	45·375	242·000	60·500	151·250	30·250	83·187	7·562	49½
50	200·000	46·296	246·296	61·728	153·704	30·864	84·259	7·716	50
50½	203·403	47·227	250·629	62·970	156·176	31·485	85·336	7·871	50½
51	206·833	48·167	255·000	64·222	158·667	32·111	86·417	8·028	51
51½	210·291	49·116	259·407	65·488	161·176	32·744	87·502	8·186	51½
52	213·778	50·074	263·852	66·765	163·704	33·383	88·593	8·346	52
52½	217·291	51·042	268·333	68·056	166·250	34·028	89·687	8·507	52½
53	220·833	52·018	272·852	69·357	168·815	34·679	90·787	8·670	53
53½	224·403	53·004	277·407	70·672	171·398	35·336	91·891	8·834	53½
54	228·000	54·000	282·000	72·000	174·000	36·000	93·000	9·000	54
54½	231·625	55·004	286·629	73·339	176·620	36·670	94·113	9·167	54½
55	235·278	56·018	291·296	74·691	179·259	37·346	95·231	9·336	55
55½	238·958	57·042	296·000	76·056	181·917	38·028	96·354	9·507	55½
56	242·667	58·074	300·741	77·432	184·593	38·716	97·481	9·679	56
56½	246·403	59·116	305·519	78·821	187·287	39·411	98·613	9·853	56½
57	250·167	60·167	310·333	80·222	190·000	40·111	99·750	10·028	57
57½	253·958	61·227	315·185	81·636	192·731	40·818	100·891	10·204	57½
58	257·778	62·296	320·074	83·061	195·481	41·531	102·037	10·383	58
58½	261·625	63·375	325·000	84·500	198·250	42·250	103·187	10·563	58½
59	265·500	64·463	329·963	85·951	201·037	42·975	104·343	10·744	59
59½	269·403	65·560	334·963	87·413	203·843	43·707	105·502	10·927	59½
60	273·333	66·667	340·000	88·889	206·667	44·444	106·667	11·111	60

TABLE XXIX.—Base 34 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·644	·004	·648	·005	·639	·003	·632	·001	½
1	1·315	·018	1·333	·024	1·296	·012	1·269	·003	1
1½	2·014	·042	2·056	·056	1·972	·028	1·910	·007	1½
2	2·741	·074	2·815	·099	2·667	·049	2·556	·012	2
2½	3·495	·116	3·611	·155	3·380	·077	3·206	·019	2½
3	4·278	·167	4·444	·222	4·111	·111	3·861	·028	3
3½	5·088	·227	5·315	·303	4·861	·151	4·521	·039	3½
4	5·926	·296	6·222	·395	5·630	·197	5·185	·049	4
4½	6·792	·375	7·167	·500	6·417	·250	5·854	·062	4½
5	7·685	·463	8·148	·617	7·222	·309	6·528	·077	5
5½	8·606	·560	9·167	·747	8·046	·374	7·206	·093	5½
6	9·556	·667	10·222	·889	8·889	·444	7·889	·111	6
6½	10·532	·782	11·315	1·044	9·750	·522	8·576	·130	6½
7	11·537	·907	12·444	1·209	10·630	·605	9·268	·151	7
7½	12·569	1·042	13·611	1·389	11·528	·695	9·965	·174	7½
8	13·630	1·185	14·815	1·580	12·444	·790	10·667	·197	8
8½	14·718	1·338	16·056	1·784	13·380	·892	11·373	·223	8½
9	15·833	1·500	17·333	2·000	14·333	1·000	12·083	·250	9
9½	16·977	1·672	18·648	2·229	15·306	1·115	12·799	·279	9½
10	18·148	1·852	20·000	2·470	16·296	1·235	13·518	·309	10
10½	19·347	2·042	21·389	2·723	17·306	1·361	14·243	·340	10½
11	20·574	2·241	22·815	2·988	18·333	1·494	14·972	·373	11
11½	21·829	2·449	24·278	3·265	19·380	1·633	15·706	·408	11½
12	23·111	2·667	25·778	3·556	20·444	1·778	16·444	·444	12
12½	24·421	2·894	27·315	3·859	21·528	1·929	17·187	·482	12½
13	25·759	3·129	28·889	4·173	22·630	2·086	17·935	·521	13
13½	27·125	3·375	30·500	4·500	23·750	2·250	18·687	·562	13½
14	28·519	3·630	32·148	4·839	24·889	2·419	19·444	·605	14
14½	29·940	3·894	33·833	5·191	26·046	2·596	20·206	·649	14½
15	31·389	4·167	35·556	5·556	27·222	2·778	20·972	·694	15
15½	32·866	4·449	37·315	5·933	28·417	2·966	21·743	·741	15½
16	34·370	4·741	39·111	6·321	29·630	3·161	22·518	·790	16
16½	35·903	5·042	40·944	6·723	30·861	3·361	23·299	·840	16½
17	37·463	5·352	42·815	7·136	32·111	3·568	24·083	·892	17
17½	39·051	5·671	44·722	7·562	33·380	3·781	24·873	·945	17½
18	40·667	6·000	46·667	8·000	34·667	4·000	25·667	1·000	18
18½	42·310	6·338	48·648	8·451	35·972	4·225	26·465	1·056	18½
19	43·981	6·685	50·667	8·913	37·296	4·457	27·268	1·114	19
19½	45·681	7·042	52·722	9·389	38·639	4·695	28·076	1·174	19½
20	47·407	7·407	54·815	9·877	40·000	4·939	28·889	1·235	20
20½	49·162	7·782	56·944	10·377	41·380	5·188	29·706	1·297	20½
21	50·944	8·167	59·111	10·889	42·778	5·444	30·528	1·361	21
21½	52·754	8·560	61·315	11·413	44·194	5·707	31·354	1·427	21½
22	54·593	8·963	63·556	11·951	45·630	5·975	32·185	1·494	22
22½	56·458	9·375	65·833	12·500	47·083	6·250	33·021	1·562	22½
23	58·352	9·796	68·148	13·061	48·556	6·531	33·861	1·633	23
23½	60·273	10·227	70·500	13·636	50·046	6·818	34·706	1·705	23½
24	62·222	10·667	72·889	14·222	51·556	7·111	35·556	1·778	24
24½	64·199	11·116	75·315	14·821	53·083	7·411	36·410	1·853	24½
25	66·204	11·574	77·778	15·432	54·630	7·716	37·268	1·929	25
25½	68·236	12·042	80·278	16·056	56·194	8·028	38·132	2·007	25½
26	70·296	12·518	82·815	16·691	57·778	8·347	39·000	2·086	26
26½	72·384	13·004	85·389	17·339	59·380	8·670	39·873	2·167	26½
27	74·500	13·500	88·000	18·000	61·000	9·000	40·750	2·250	27
27½	76·643	14·004	90·648	18·672	62·639	9·336	41·632	2·334	27½
28	78·815	14·518	93·333	19·357	64·296	9·679	42·518	2·420	28
28½	81·014	15·042	96·056	20·056	65·972	10·028	43·410	2·507	28½
29	83·241	15·574	98·815	20·765	67·667	10·383	44·306	2·596	29
29½	85·496	16·116	101·611	21·488	69·380	10·744	45·206	2·686	29½
30	87·778	16·667	104·444	22·222	71·111	11·111	46·111	2·778	30

TABLE XXX.—Base 35 Feet.

Depth in feet.	1½ to 1		2 to 1		Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	90·050	16·946	106·995	22·594		172·411	37·918	210·329	50·557
	91·217	17·227	108·444	22·970		173·995	38·338	212·333	51·117
	92·392	17·510	109·903	23·347		175·587	38·760	214·347	51·681
31	93·574	17·796	111·370	23·728	46	177·185	39·185	216·370	52·247
	94·763	18·084	112·847	24·113		178·790	39·612	218·403	52·816
	95·958	18·375	114·333	24·500		180·402	40·042	220·444	53·389
	97·161	18·668	115·829	24·890		182·022	40·473	222·495	53·965
32	98·370	18·963	117·333	25·284	47	183·648	40·907	224·556	54·543
	99·587	19·260	118·847	25·681		185·281	41·344	226·625	55·125
	100·810	19·560	120·370	26·080		186·921	41·782	228·704	55·709
	102·040	19·862	121·903	26·483		188·568	42·223	230·792	56·298
33	103·278	20·167	123·444	26·889	48	190·222	42·667	232·889	56·889
	104·522	20·473	124·995	27·298		191·883	43·112	234·995	57·483
	105·773	20·782	126·556	27·709		193·551	43·560	237·111	58·080
	107·031	21·094	128·125	28·125		195·226	44·010	239·236	58·681
34	108·296	21·407	129·704	28·543	49	196·907	44·463	241·370	59·284
	109·568	21·723	131·292	28·965		198·596	44·918	243·514	59·890
	110·846	22·042	132·889	29·389		200·291	45·375	245·667	60·500
	112·133	22·362	134·495	29·816		201·994	45·834	247·829	61·113
35	113·425	22·685	136·111	30·247	50	203·703	46·296	250·000	61·728
	114·726	23·010	137·736	30·681		205·420	46·760	252·181	62·347
	116·032	23·338	139·370	31·117		207·144	47·227	254·370	62·970
	117·346	23·668	141·014	31·557		208·874	47·696	256·569	63·594
36	118·667	24·000	142·667	32·000	51	210·611	48·167	258·778	64·222
	119·994	24·334	144·329	32·446		212·355	48·640	260·995	64·853
	121·328	24·671	146·000	32·895		214·107	49·116	263·222	65·488
	122·670	25·010	147·681	33·347		215·865	49·594	265·458	66·125
37	124·018	25·352	149·370	33·802	52	217·630	50·074	267·704	66·765
	125·374	25·696	151·069	34·261		219·402	50·557	269·958	67·409
	126·736	26·042	152·778	34·722		221·181	51·042	272·222	68·056
	128·105	26·390	154·495	35·187		222·966	51·529	274·495	68·705
38	129·481	26·741	156·222	35·654	53	224·759	52·018	276·778	69·357
	130·865	27·094	157·958	36·125		226·559	52·510	279·069	70·014
	132·254	27·449	159·704	36·599		228·366	53·004	281·370	70·672
	133·652	27·807	161·458	37·076		230·179	53·501	283·681	71·335
39	135·056	28·167	163·222	37·556	54	232·000	54·000	286·000	72·000
	136·466	28·529	164·995	38·039		233·827	54·501	288·329	72·668
	137·884	28·894	166·778	38·525		235·662	55·004	290·667	73·339
	139·309	29·260	168·569	39·014		237·503	55·510	293·014	74·014
40	140·741	29·630	170·370	39·506	55	239·352	56·018	295·370	74·691
	142·179	30·001	172·181	40·002		241·207	56·529	297·736	75·372
	143·625	30·375	174·000	40·500		243·070	57·042	300·111	76·056
	145·078	30·751	175·829	41·002		244·939	57·557	302·495	76·742
41	146·537	31·129	177·667	41·506	56	246·814	58·074	304·889	77·432
	148·003	31·510	179·514	42·014		248·698	58·594	307·292	78·125
	149·476	31·894	181·370	42·525		250·588	59·116	309·704	78·821
	150·957	32·279	183·236	43·039		252·485	59·640	312·125	79·520
42	152·444	32·667	185·111	43·556	57	254·389	60·167	314·556	80·222
	153·939	33·057	186·995	44·076		256·300	60·696	316·995	80·928
	155·439	33·449	188·889	44·599		258·217	61·227	319·444	81·636
	156·948	33·844	190·792	45·125		260·142	61·760	321·903	82·347
43	158·462	34·241	192·704	45·654	58	262·074	62·296	324·370	83·061
	159·985	34·640	194·625	46·187		264·013	62·834	326·847	83·779
	161·513	35·042	196·556	46·722		265·958	63·375	329·333	84·500
	163·050	35·446	198·495	47·261		267·911	63·918	331·829	85·224
44	164·592	35·852	200·444	47·802	59	269·870	64·463	334·333	85·951
	166·142	36·260	202·403	48·347		271·837	65·010	336·847	86·681
	167·699	36·671	204·370	48·895		273·810	65·560	339·370	87·413
	169·263	37·085	206·347	49·446		275·791	66·112	341·903	88·150
45	170·853	37·500	208·333	50·000	60	277·778	66·667	344·444	88·889

TABLE XXX.—Base 35 Feet.

Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	·328	·001	·329	·002
½	·662	·004	·667	·005
¾	1·003	·010	1·014	·014
1	1·352	·018	1·370	·024
¼	1·707	·029	1·736	·039
½	2·070	·042	2·111	·056
¾	2·439	·057	2·495	·076
2	2·814	·074	2·889	·099
¼	3·198	·094	3·292	·125
½	3·588	·116	3·704	·155
¾	3·985	·140	4·125	·187
3	4·389	·167	4·556	·222
¼	4·800	·196	4·995	·261
½	5·217	·227	5·444	·303
¾	5·642	·260	5·903	·347
4	6·074	·296	6·370	·395
¼	6·513	·334	6·847	·446
½	6·958	·375	7·333	·500
¾	7·411	·418	7·829	·557
5	7·870	·463	8·333	·617
¼	8·337	·510	8·847	·681
½	8·810	·560	9·370	·747
¾	9·290	·612	9·903	·816
6	9·778	·667	10·444	·889
¼	10·272	·723	10·995	·965
½	10·773	·782	11·556	1·044
¾	11·281	·844	12·125	1·125
7	11·796	·907	12·704	1·209
¼	12·318	·973	13·292	1·298
½	12·846	1·042	13·889	1·389
¾	13·383	1·112	14·495	1·483
8	13·925	1·185	15·111	1·580
¼	14·476	1·260	15·736	1·681
½	15·052	1·338	16·370	1·784
¾	15·596	1·418	17·014	1·890
9	16·167	1·500	17·667	2·000
¼	16·744	1·584	18·329	2·113
½	17·328	1·672	19·000	2·229
¾	17·920	1·760	19·681	2·347
10	18·518	1·852	20·370	2·470
¼	19·124	1·946	21·069	2·594
½	19·736	2·042	21·778	2·723
¾	20·355	2·140	22·495	2·853
11	20·981	2·241	23·222	2·988
¼	21·615	2·344	23·958	3·125
½	22·254	2·449	24·704	3·265
¾	22·902	2·557	25·458	3·409
12	23·556	2·667	26·222	3·556
¼	24·216	2·779	26·995	3·705
½	24·884	2·894	27·778	3·859
¾	25·559	3·010	28·569	4·014
13	26·241	3·129	29·370	4·173
¼	26·929	3·251	30·181	4·335
½	27·625	3·375	31·000	4·500
¾	28·328	3·501	31·829	4·668
14	29·037	3·630	32·667	4·839
¼	29·753	3·760	33·514	5·014
½	30·476	3·894	34·370	5·191
¾	31·207	4·029	35·236	5·372
15	31·944	4·167	36·111	5·556

Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	32·689	4·307	36·995	5·742
½	33·439	4·449	37·889	5·933
¾	34·198	4·594	38·792	6·125
16	34·962	4·741	39·704	6·321
¼	35·735	4·890	40·625	6·520
½	36·513	5·042	41·556	6·723
¾	37·300	5·196	42·495	6·928
17	38·092	5·352	43·444	7·136
¼	38·892	5·510	44·403	7·347
½	39·699	5·671	45·370	7·562
¾	40·513	5·835	46·347	7·779
18	41·333	6·000	47·333	8·000
¼	42·161	6·168	48·329	8·224
½	42·995	6·338	49·333	8·451
¾	43·837	6·510	50·347	8·681
19	44·685	6·685	51·370	8·913
¼	45·540	6·862	52·403	9·150
½	46·402	7·042	53·444	9·389
¾	47·272	7·223	54·495	9·631
20	48·148	7·407	55·556	9·877
¼	49·031	7·594	56·625	10·125
½	49·921	7·782	57·704	10·377
¾	50·818	7·973	58·792	10·631
21	51·722	8·167	59·889	10·889
¼	52·633	8·362	60·995	11·150
½	53·551	8·560	62·111	11·413
¾	54·476	8·760	63·236	11·681
22	55·407	8·963	64·370	11·951
¼	56·346	9·168	65·514	12·224
½	57·291	9·375	66·667	12·500
¾	58·244	9·585	67·829	12·779
23	59·203	9·796	69·000	13·061
¼	60·170	10·010	70·181	13·347
½	61·144	10·227	71·370	13·636
¾	62·124	10·446	72·569	13·928
24	63·111	10·667	73·778	14·222
¼	64·105	10·890	74·995	14·520
½	65·107	11·116	76·222	14·821
¾	66·115	11·344	77·458	15·125
25	67·130	11·574	78·704	15·432
¼	68·152	11·807	79·958	15·742
½	69·181	12·042	81·222	16·056
¾	70·216	12·279	82·495	16·372
26	71·259	12·518	83·778	16·691
¼	72·309	12·760	85·069	17·014
½	73·366	13·004	86·370	17·339
¾	74·429	13·251	87·681	17·668
27	75·500	13·500	89·000	18·000
¼	76·578	13·751	90·329	18·335
½	77·662	14·004	91·667	18·672
¾	78·753	14·260	93·014	19·014
28	79·852	14·518	94·370	19·357
¼	80·957	14·779	95·736	19·705
½	82·070	15·042	97·111	20·056
¾	83·189	15·307	98·495	20·409
29	84·314	15·574	99·889	20·765
¼	85·448	15·844	101·292	21·125
½	86·588	16·116	102·704	21·488
¾	87·735	16·390	104·125	21·853
30	88·889	16·667	105·556	22·222

TABLE XXX.—Base 35 Feet.

Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	90·050	16·946	106·995	22·594
	91·217	17·227	108·444	22·970
	92·392	17·510	109·903	23·347
31	93·574	17·796	111·370	23·728
	94·763	18·084	112·847	24·113
	95·958	18·375	114·333	24·500
	97·161	18·668	115·829	24·890
32	98·370	18·963	117·333	25·284
	99·587	19·260	118·847	25·681
	100·810	19·560	120·370	26·080
	102·040	19·862	121·903	26·483
33	103·278	20·167	123·444	26·889
	104·522	20·473	124·995	27·298
	105·773	20·782	126·556	27·709
	107·031	21·094	128·125	28·125
34	108·296	21·407	129·704	28·543
	109·568	21·723	131·292	28·965
	110·846	22·042	132·889	29·389
	112·133	22·362	134·495	29·816
35	113·425	22·685	136·111	30·247
	114·726	23·010	137·736	30·681
	116·032	23·338	139·370	31·117
	117·346	23·668	141·014	31·557
36	118·667	24·000	142·667	32·000
	119·994	24·334	144·329	32·446
	121·328	24·671	146·000	32·895
	122·670	25·010	147·681	33·347
37	124·018	25·352	149·370	33·802
	125·374	25·696	151·069	34·261
	126·736	26·042	152·778	34·722
	128·105	26·390	154·495	35·187
38	129·481	26·741	156·222	35·654
	130·865	27·094	157·958	36·125
	132·254	27·449	159·704	36·599
	133·652	27·807	161·458	37·076
39	135·056	28·167	163·222	37·556
	136·466	28·529	164·995	38·039
	137·884	28·894	166·778	38·525
	139·309	29·260	168·569	39·014
40	140·741	29·630	170·370	39·506
	142·179	30·001	172·181	40·002
	143·625	30·375	174·000	40·500
	145·078	30·751	175·829	41·002
41	146·537	31·129	177·667	41·506
	148·003	31·510	179·514	42·014
	149·476	31·894	181·370	42·525
	150·957	32·279	183·236	43·039
42	152·444	32·667	185·111	43·556
	153·939	33·057	186·995	44·076
	155·439	33·449	188·889	44·599
	156·948	33·844	190·792	45·125
43	158·462	34·241	192·704	45·654
	159·985	34·640	194·625	46·187
	161·513	35·042	196·556	46·722
	163·050	35·446	198·495	47·261
44	164·592	35·852	200·444	47·802
	166·142	36·260	202·403	48·347
	167·699	36·671	204·370	48·895
	169·263	37·085	206·347	49·446
45	170·853	37·500	208·333	50·000

Depth in feet.	1½ to 1		2 to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	172·411	37·918	210·329	50·557
	173·995	38·338	212·333	51·117
	175·587	38·760	214·347	51·681
46	177·185	39·185	216·370	52·247
	178·790	39·612	218·403	52·816
	180·402	40·042	220·444	53·389
	182·022	40·473	222·495	53·965
47	183·648	40·907	224·556	54·543
	185·281	41·344	226·625	55·125
	186·921	41·782	228·704	55·709
	188·568	42·223	230·792	56·298
48	190·222	42·667	232·889	56·889
	191·883	43·112	234·995	57·483
	193·551	43·560	237·111	58·080
	195·226	44·010	239·236	58·681
49	196·907	44·463	241·370	59·284
	198·596	44·918	243·514	59·890
	200·291	45·375	245·667	60·500
	201·994	45·834	247·829	61·113
50	203·703	46·296	250·000	61·728
	205·420	46·760	252·181	62·347
	207·144	47·227	254·370	62·970
	208·874	47·696	256·569	63·594
51	210·611	48·167	258·778	64·222
	212·355	48·640	260·995	64·853
	214·107	49·116	263·222	65·488
	215·865	49·594	265·458	66·125
52	217·630	50·074	267·704	66·765
	219·402	50·557	269·958	67·409
	221·181	51·042	272·222	68·056
	222·966	51·529	274·495	68·705
53	224·759	52·018	276·778	69·357
	226·559	52·510	279·069	70·014
	228·366	53·004	281·370	70·672
	230·179	53·501	283·681	71·335
54	232·000	54·000	286·000	72·000
	233·827	54·501	288·329	72·668
	235·662	55·004	290·667	73·339
	237·503	55·510	293·014	74·014
55	239·352	56·018	295·370	74·691
	241·207	56·529	297·736	75·372
	243·070	57·042	300·111	76·056
	244·939	57·557	302·495	76·742
56	246·814	58·074	304·889	77·432
	248·698	58·594	307·292	78·125
	250·588	59·116	309·704	78·821
	252·485	59·640	312·125	79·520
57	254·389	60·167	314·556	80·222
	256·300	60·696	316·995	80·928
	258·217	61·227	319·444	81·636
	260·142	61·760	321·903	82·347
58	262·074	62·296	324·370	83·061
	264·013	62·834	326·847	83·779
	265·958	63·375	329·333	84·500
	267·911	63·918	331·829	85·224
59	269·870	64·463	334·333	85·951
	271·837	65·010	336·847	86·681
	273·810	65·560	339·370	87·413
	275·791	66·112	341·903	88·150
60	277·778	66·667	344·444	88·889

TABLE XXX.—Base 35 Feet—*continued.*

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
¼	·326	·001	·325	·000	¼	28·382	2·871	21·922	·718
½	·657	·003	·651	·001	½	28·991	2·966	22·316	·741
¾	·993	·007	·977	·002	¾	29·604	3·063	22·714	·766
1	1·333	·012	1·306	·003	16	30·222	3·161	23·111	·790
¼	1·678	·019	1·635	·005	¼	30·845	3·260	23·510	·815
½	2·028	·028	1·965	·007	½	31·472	3·361	23·908	·840
¾	2·382	·038	2·297	·009	¾	32·104	3·464	24·311	·866
2	2·741	·049	2·630	·012	17	32·741	3·568	24·712	·892
¼	3·104	·062	2·964	·016	¼	33·382	3·674	25·116	·918
½	3·472	·077	3·299	·019	½	34·028	3·781	25·521	·945
¾	3·845	·093	3·635	·023	¾	34·678	3·890	25·927	·972
3	4·222	·111	3·972	·028	18	35·333	4·000	26·333	1·000
¼	4·604	·130	4·311	·033	¼	35·993	4·112	26·741	1·028
½	4·991	·151	4·650	·039	½	36·657	4·225	27·150	1·056
¾	5·382	·174	4·991	·043	¾	37·326	4·340	27·561	1·085
4	5·778	·197	5·333	·049	19	38·000	4·457	27·972	1·114
¼	6·178	·223	5·677	·056	¼	38·678	4·575	28·385	1·144
½	6·583	·250	6·021	·062	½	39·361	4·695	28·799	1·174
¾	6·993	·279	6·366	·070	¾	40·049	4·816	29·214	1·204
5	7·407	·309	6·713	·077	20	40·741	4·939	29·630	1·235
¼	7·826	·340	7·061	·085	¼	41·437	5·063	30·047	1·266
½	8·250	·374	7·410	·093	½	42·139	5·188	30·464	1·297
¾	8·678	·408	7·760	·102	¾	42·845	5·316	30·885	1·329
6	9·111	·444	8·111	·111	21	43·556	5·444	31·306	1·361
¼	9·549	·482	8·464	·121	¼	44·271	5·575	31·727	1·394
½	9·991	·522	8·817	·130	½	44·991	5·707	32·150	1·427
¾	10·437	·562	9·172	·141	¾	45·715	5·840	32·575	1·460
7	10·889	·605	9·528	·151	22	46·444	5·975	33·000	1·494
¼	11·345	·649	9·885	·162	¼	47·178	6·112	33·427	1·528
½	11·806	·695	10·243	·174	½	47·917	6·250	33·855	1·562
¾	12·271	·742	10·602	·185	¾	48·660	6·390	34·283	1·597
8	12·741	·790	10·963	·197	23	49·407	6·531	34·713	1·633
¼	13·215	·840	11·325	·210	¼	50·160	6·674	35·144	1·668
½	13·694	·892	11·687	·223	½	50·917	6·818	35·575	1·705
¾	14·178	·945	12·051	·236	¾	51·678	6·964	36·010	1·741
9	14·667	1·000	12·416	·250	24	52·444	7·111	36·444	1·778
¼	15·160	1·056	12·783	·264	¼	53·215	7·260	36·880	1·815
½	15·657	1·115	13·150	·279	½	53·991	7·411	37·317	1·853
¾	16·160	1·174	13·519	·293	¾	54·771	7·563	37·755	1·891
10	16·667	1·235	13·889	·309	25	55·556	7·716	38·195	1·929
¼	17·178	1·297	14·260	·324	¼	56·345	7·871	38·635	1·968
½	17·694	1·361	14·632	·340	½	57·139	8·028	39·077	2·007
¾	18·215	1·427	15·005	·357	¾	57·937	8·186	39·519	2·046
11	18·741	1·494	15·380	·373	26	58·741	8·347	39·963	2·086
¼	19·271	1·562	15·755	·391	¼	59·549	8·507	40·408	2·127
½	19·806	1·633	16·132	·408	½	60·361	8·670	40·854	2·167
¾	20·345	1·704	16·510	·426	¾	61·178	8·834	41·302	2·209
12	20·889	1·778	16·889	·444	27	62·000	9·000	41·750	2·250
¼	21·437	1·853	17·269	·463	¼	62·826	9·167	42·200	2·292
½	21·991	1·929	17·650	·482	½	63·657	9·336	42·651	2·334
¾	22·549	2·007	18·033	·502	¾	64·493	9·507	43·102	2·377
13	23·111	2·086	18·417	·521	28	65·333	9·679	43·556	2·420
¼	23·678	2·167	18·802	·542	¼	66·178	9·853	44·010	2·463
½	24·250	2·250	19·188	·562	½	67·028	10·028	44·466	2·507
¾	24·826	2·334	19·575	·584	¾	67·882	10·204	44·922	2·551
14	25·407	2·419	19·963	·605	29	68·741	10·383	45·380	2·596
¼	25·993	2·507	20·352	·627	¼	69·604	10·563	45·839	2·641
½	26·583	2·596	20·742	·649	½	70·472	10·744	46·299	2·686
¾	27·178	2·686	21·135	·671	¾	71·345	10·927	46·760	2·732
15	27·778	2·778	21·527	·694	30	72·222	11·111	47·222	2·778

Depth in feet.	1 to 1		¼ to 1		Depth in feet.	1 to 1		¼ to 1	
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.		Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.
	73·104	11·297	47·686	2·824		134·493	25·279	77·616	6·320
	73·991	11·485	48·150	2·871		135·657	25·559	78·150	6·390
	74·882	11·674	48·616	2·918		136·826	25·840	78·686	6·460
31	75·778	11·864	49·083	2·966	46	138·000	26·123	79·222	6·531
	76·678	12·056	49·552	3·014		139·178	26·408	79·760	6·602
	77·583	12·250	50·021	3·062		140·361	26·694	80·299	6·673
	78·493	12·445	50·491	3·111		141·549	26·982	80·839	6·746
32	79·407	12·642	50·963	3·160	47	142·741	27·272	81·380	6·818
	80·326	12·840	51·436	3·210		143·937	27·563	81·922	6·891
	81·250	13·040	51·910	3·260		145·139	27·855	82·466	6·964
	82·178	13·242	52·385	3·310		146·345	28·149	83·010	7·037
33	83·111	13·444	52·861	3·361	48	147·556	28·444	83·556	7·111
	84·049	13·649	53·339	3·412		148·771	28·742	84·102	7·185
	84·991	13·855	53·817	3·464		149·991	29·040	84·651	7·260
	85·937	14·062	54·297	3·516		151·215	29·340	85·200	7·335
34	86·889	14·272	54·778	3·568	49	152·444	29·642	85·750	7·410
	87·845	14·482	55·260	3·621		153·678	29·945	86·302	7·486
	88·806	14·694	55·743	3·674		154·917	30·250	86·854	7·562
	89·771	14·908	56·227	3·727		156·160	30·556	87·408	7·639
35	90·741	15·123	56·713	3·781	50	157·407	30·864	87·963	7·716
	91·715	15·340	57·200	3·835		158·660	31·174	88·519	7·793
	92·694	15·559	57·687	3·890		159·917	31·485	89·077	7·871
	93·678	15·779	58·176	3·945		161·178	31·797	89·635	7·949
36	94·667	16·000	58·667	4·000	51	162·444	32·111	90·195	8·028
	95·660	16·223	59·158	4·056		163·715	32·427	90·755	8·107
	96·657	16·447	59·650	4·112		164·991	32·744	91·317	8·186
	97·660	16·674	60·144	4·168		166·271	33·063	91·880	8·266
37	98·667	16·901	60·639	4·225	52	167·556	33·383	92·444	8·346
	99·678	17·130	61·135	4·283		168·845	33·704	93·010	8·426
	100·694	17·361	61·632	4·340		170·139	34·028	93·575	8·507
	101·715	17·593	62·130	4·398		171·437	34·353	94·144	8·588
38	102·741	17·827	62·630	4·457	53	172·741	34·679	94·713	8·670
	103·771	18·062	63·130	4·516		174·049	35·007	95·283	8·752
	104·806	18·299	63·632	4·575		175·361	35·336	95·855	8·834
	105·845	18·538	64·135	4·634		176·678	35·667	96·427	8·917
39	106·889	18·778	64·639	4·694	54	178·000	36·000	97·000	9·000
	107·937	19·019	65·144	4·755		179·326	36·334	97·575	9·084
	108·991	19·263	65·650	4·816		180·657	36·670	98·150	9·167
	110·049	19·507	66·158	4·877		181·993	37·007	98·727	9·252
40	111·111	19·753	66·667	4·938	55	183·333	37·346	99·306	9·336
	112·178	20·001	67·176	5·000		184·678	37·686	99·885	9·421
	113·250	20·250	67·687	5·062		186·028	38·028	100·464	9·507
	114·326	20·501	68·200	5·125		187·382	38·371	101·047	9·593
41	115·407	20·753	68·713	5·188	56	188·741	38·716	101·630	9·679
	116·493	21·007	69·227	5·252		190·104	39·063	102·214	9·766
	117·583	21·263	69·743	5·316		191·472	39·411	102·799	9·853
	118·678	21·519	70·260	5·380		192·845	39·760	103·385	9·940
42	119·778	21·778	70·778	5·444	57	194·222	40·111	103·972	10·028
	120·882	22·038	71·297	5·509		195·604	40·464	104·561	10·116
	121·991	22·299	71·817	5·575		196·991	40·818	105·150	10·204
	123·104	22·563	72·339	5·641		198·382	41·174	105·741	10·293
43	124·222	22·827	72·861	5·707	58	199·778	41·531	106·333	10·383
	125·345	23·093	73·385	5·773		201·178	41·890	106·927	10·472
	126·472	23·361	73·910	5·840		202·583	42·250	107·521	10·563
	127·604	23·630	74·436	5·908		203·993	42·612	108·116	10·653
44	128·741	23·901	74·963	5·975	59	205·407	42·975	108·712	10·744
	129·882	24·174	75·491	6·043		206·826	43·340	109·311	10·835
	131·028	24·447	76·021	6·112		208·250	43·707	109·908	10·927
	132·178	24·723	76·552	6·181		209·678	44·075	110·510	11·019
45	133·333	25·000	77·083	6·250	60	211·111	44·444	111·111	11·111

TABLE XXXI.—Base 36 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·680	·004	·685	·005	·676	·003	·669	·001	½
1	1·389	·018	1·407	·024	1·370	·012	1·343	·003	1
1½	2·125	·042	2·167	·056	2·083	·028	2·021	·007	1½
2	2·889	·074	2·963	·099	2·815	·049	2·704	·012	2
2½	3·680	·116	3·796	·155	3·565	·077	3·391	·019	2½
3	4·500	·167	4·667	·222	4·333	·111	4·083	·028	3
3½	5·347	·227	5·574	·303	5·120	·151	4·780	·039	3½
4	6·222	·296	6·519	·395	5·926	·197	5·481	·049	4
4½	7·125	·375	7·500	·500	6·750	·250	6·187	·062	4½
5	8·056	·463	8·519	·617	7·593	·309	6·898	·077	5
5½	9·014	·560	9·574	·747	8·454	·374	7·613	·093	5½
6	10·000	·667	10·667	·889	9·333	·444	8·333	·111	6
6½	11·014	·782	11·796	1·044	10·231	·522	9·058	·130	6½
7	12·056	·907	12·963	1·209	11·148	·605	9·787	·151	7
7½	13·125	1·042	14·167	1·389	12·083	·695	10·521	·174	7½
8	14·222	1·185	15·407	1·580	13·037	·790	11·259	·197	8
8½	15·347	1·338	16·685	1·784	14·009	·892	12·002	·223	8½
9	16·500	1·500	18·000	2·000	15·000	1·000	12·750	·250	9
9½	17·680	1·672	19·352	2·229	16·009	1·115	13·502	·279	9½
10	18·889	1·852	20·741	2·470	17·037	1·235	14·259	·309	10
10½	20·125	2·042	22·167	2·723	18·083	1·361	15·021	·340	10½
11	21·389	2·241	23·630	2·988	19·148	1·494	15·787	·373	11
11½	22·680	2·449	25·130	3·265	20·231	1·633	16·558	·408	11½
12	24·000	2·667	26·667	3·556	21·333	1·778	17·333	·444	12
12½	25·348	2·894	28·241	3·859	22·454	1·929	18·113	·482	12½
13	26·722	3·129	29·852	4·173	23·593	2·086	18·898	·521	13
13½	28·125	3·375	31·500	4·500	24·750	2·250	19·687	·562	13½
14	29·556	3·630	33·185	4·839	25·926	2·419	20·481	·605	14
14½	31·014	3·894	34·907	5·191	27·120	2·596	21·280	·649	14½
15	32·500	4·167	36·667	5·556	28·333	2·778	22·083	·694	15
15½	34·014	4·449	38·463	5·933	29·565	2·966	22·891	·741	15½
16	35·556	4·741	40·296	6·321	30·815	3·161	23·704	·790	16
16½	37·125	5·042	42·167	6·723	32·083	3·361	24·521	·840	16½
17	38·722	5·352	44·074	7·136	33·370	3·568	25·343	·892	17
17½	40·348	5·671	46·018	7·562	34·676	3·781	26·169	·945	17½
18	42·000	6·000	48·000	8·000	36·000	4·000	27·000	1·000	18
18½	43·680	6·338	50·018	8·451	37·343	4·225	27·836	1·056	18½
19	45·389	6·685	52·074	8·913	38·704	4·457	28·676	1·114	19
19½	47·125	7·042	54·167	9·389	40·083	4·695	29·521	1·174	19½
20	48·889	7·407	56·296	9·877	41·481	4·939	30·370	1·235	20
20½	50·680	7·782	58·463	10·377	42·898	5·188	31·225	1·297	20½
21	52·500	8·167	60·667	10·889	44·333	5·444	32·083	1·361	21
21½	54·347	8·560	62·907	11·413	45·787	5·707	32·947	1·427	21½
22	56·222	8·963	65·185	11·951	47·259	5·975	33·815	1·494	22
22½	58·125	9·375	67·500	12·500	48·750	6·250	34·687	1·562	22½
23	60·056	9·796	69·852	13·061	50·259	6·531	35·565	1·633	23
23½	62·014	10·227	72·241	13·636	51·787	6·818	36·447	1·705	23½
24	64·000	10·667	74·667	14·222	53·333	7·111	37·333	1·778	24
24½	66·014	11·116	77·130	14·821	54·898	7·411	38·225	1·853	24½
25	68·056	11·574	79·630	15·432	56·481	7·716	39·120	1·929	25
25½	70·125	12·042	82·167	16·056	58·083	8·028	40·021	2·007	25½
26	72·222	12·518	84·741	16·691	59·704	8·347	40·926	2·086	26
26½	74·347	13·004	87·352	17·339	61·343	8·670	41·836	2·167	26½
27	76·500	13·500	90·000	18·000	63·000	9·000	42·750	2·250	27
27½	78·680	14·004	92·685	18·672	64·676	9·336	43·669	2·334	27½
28	80·889	14·518	95·407	19·357	66·370	9·679	44·593	2·420	28
28½	83·125	15·042	98·167	20·056	68·083	10·028	45·521	2·507	28½
29	85·389	15·574	100·963	20·765	69·815	10·383	46·454	2·596	29
29½	87·680	16·116	103·796	21·488	71·565	10·744	47·391	2·686	29½
30	90·000	16·667	106·667	22·222	73·333	11·111	48·333	2·778	30

TABLE XXXI.—Base 36 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
30½	92·348	17·227	109·574	22·970	75·120	11·485	49·280	2·871	30½
31	94·722	17·796	112·519	23·728	76·926	11·864	50·231	2·966	31
31½	97·125	18·375	115·500	24·500	78·750	12·250	51·187	3·062	31½
32	99·556	18·963	118·519	25·284	80·593	12·642	52·148	3·160	32
32½	102·014	19·560	121·574	26·080	82·454	13·040	53·113	3·260	32½
33	104·500	20·167	124·667	26·889	84·333	13·444	54·083	3·361	33
33½	107·014	20·782	127·796	27·709	86·231	13·855	55·058	3·464	33½
34	109·556	21·407	130·963	28·543	88·148	14·272	56·037	3·568	34
34½	112·125	22·042	134·167	29·389	90·083	14·694	57·021	3·674	34½
35	114·722	22·685	137·407	30·247	92·037	15·123	58·009	3·781	35
35½	117·348	23·338	140·685	31·117	94·009	15·559	59·002	3·890	35½
36	120·000	24·000	144·000	32·000	96·000	16·000	60·000	4·000	36
36½	122·680	24·671	147·352	32·895	98·009	16·447	61·002	4·112	36½
37	125·389	25·352	150·741	33·802	100·037	16·901	62·009	4·225	37
37½	128·125	26·042	154·167	34·722	102·083	17·361	63·021	4·340	37½
38	130·889	26·741	157·630	35·654	104·148	17·827	64·037	4·457	38
38½	133·680	27·449	161·130	36·599	106·231	18·299	65·058	4·575	38½
39	136·500	28·167	164·667	37·556	108·333	18·778	66·083	4·694	39
39½	139·347	28·894	168·241	38·525	110·454	19·263	67·113	4·816	39½
40	142·222	29·630	171·852	39·506	112·593	19·753	68·148	4·938	40
40½	145·125	30·375	175·500	40·500	114·750	20·250	69·187	5·062	40½
41	148·056	31·129	179·185	41·506	116·926	20·753	70·231	5·188	41
41½	151·014	31·894	182·907	42·525	119·120	21·263	71·280	5·316	41½
42	154·000	32·667	186·667	43·556	121·333	21·778	72·333	5·444	42
42½	157·014	33·449	190·463	44·599	123·565	22·299	73·391	5·575	42½
43	160·056	34·241	194·296	45·654	125·815	22·827	74·454	5·707	43
43½	163·125	35·042	198·167	46·722	128·083	23·361	75·521	5·840	43½
44	166·222	35·852	202·074	47·802	130·370	23·901	76·593	5·975	44
44½	169·347	36·671	206·018	48·895	132·676	24·447	77·669	6·112	44½
45	172·500	37·500	210·000	50·000	135·000	25·000	78·750	6·250	45
45½	175·680	38·338	214·018	51·117	137·343	25·559	79·836	6·390	45½
46	178·889	39·185	218·074	52·247	139·704	26·123	80·926	6·531	46
46½	182·125	40·042	222·167	53·389	142·083	26·694	82·021	6·673	46½
47	185·389	40·907	226·296	54·543	144·481	27·272	83·120	6·818	47
47½	188·680	41·782	230·463	55·709	146·898	27·855	84·225	6·964	47½
48	192·000	42·667	234·667	56·889	149·333	28·444	85·333	7·111	48
48½	195·348	43·560	238·907	58·080	151·787	29·040	86·447	7·260	48½
49	198·722	44·463	243·185	59·284	154·259	29·642	87·565	7·410	49
49½	202·125	45·375	247·500	60·500	156·750	30·250	88·687	7·562	49½
50	205·556	46·296	251·852	61·728	159·259	30·864	89·815	7·716	50
50½	209·014	47·227	256·241	62·970	161·787	31·485	90·947	7·871	50½
51	212·500	48·167	260·667	64·222	164·333	32·111	92·083	8·028	51
51½	216·014	49·116	265·130	65·488	166·898	32·744	93·225	8·186	51½
52	219·556	50·074	269·630	66·765	169·481	33·383	94·370	8·346	52
52½	223·125	51·042	274·167	68·056	172·083	34·028	95·521	8·507	52½
53	226·722	52·018	278·741	69·357	174·704	34·679	96·676	8·670	53
53½	230·348	53·004	283·352	70·672	177·343	35·336	97·836	8·834	53½
54	234·000	54·000	288·000	72·000	180·000	36·000	99·000	9·000	54
54½	237·680	55·004	292·685	73·339	182·676	36·670	100·169	9·167	54½
55	241·389	56·018	297·407	74·691	185·370	37·346	101·343	9·336	55
55½	245·125	57·042	302·167	76·056	188·083	38·028	102·521	9·507	55½
56	248·889	58·074	306·963	77·432	190·815	38·716	103·704	9·679	56
56½	252·680	59·116	311·796	78·821	193·565	39·411	104·891	9·853	56½
57	256·500	60·167	316·667	80·222	196·333	40·111	106·083	10·028	57
57½	260·347	61·227	321·574	81·636	199·120	40·818	107·280	10·204	57½
58	264·222	62·296	326·519	83·061	201·926	41·531	108·481	10·383	58
58½	268·125	63·375	331·500	84·500	204·750	42·250	109·687	10·563	58½
59	272·056	64·463	336·519	85·951	207·593	42·975	110·898	10·744	59
59½	276·014	65·560	341·574	87·413	210·454	43·707	112·113	10·927	59½
60	280·000	66·667	346·667	88·889	213·333	44·444	113·333	11·111	60

TABLE XXXII.—Base 38 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·718	·004	·722	·005	·713	·003	·706	·001	½
1	1·463	·018	1·481	·024	1·444	·012	1·417	·003	1
1½	2·236	·042	2·278	·056	2·194	·028	2·132	·007	1½
2	3·037	·074	3·111	·099	2·963	·049	2·852	·012	2
2½	3·866	·116	3·981	·155	3·750	·077	3·576	·019	2½
3	4·722	·167	4·889	·222	4·556	·111	4·306	·028	3
3½	5·607	·227	5·833	·303	5·380	·151	5·039	·039	3½
4	6·518	·296	6·815	·395	6·222	·197	5·778	·049	4
4½	7·459	·375	7·833	·500	7·084	·250	6·521	·062	4½
5	8·426	·463	8·889	·617	7·963	·309	7·268	·077	5
5½	9·422	·560	9·981	·747	8·862	·374	8·021	·093	5½
6	10·444	·667	11·111	·889	9·778	·444	8·778	·111	6
6½	11·495	·782	12·278	1·044	10·713	·522	9·539	·130	6½
7	12·574	·907	13·481	1·209	11·667	·605	10·306	·151	7
7½	13·680	1·042	14·722	1·389	12·639	·695	11·076	·174	7½
8	14·815	1·185	16·000	1·580	13·630	·790	11·852	·197	8
8½	15·977	1·338	17·315	1·784	14·639	·892	12·632	·223	8½
9	17·167	1·500	18·667	2·000	15·667	1·000	13·417	·250	9
9½	18·384	1·672	20·056	2·229	16·713	1·115	14·206	·279	9½
10	19·630	1·852	21·481	2·470	17·778	1·235	15·000	·309	10
10½	20·903	2·042	22·944	2·723	18·862	1·361	15·799	·340	10½
11	22·203	2·241	24·444	2·988	19·963	1·494	16·602	·373	11
11½	23·533	2·449	25·981	3·265	21·084	1·633	17·410	·408	11½
12	24·889	2·667	27·556	3·556	22·222	1·778	18·222	·444	12
12½	26·274	2·894	29·167	3·859	23·380	1·929	19·039	·482	12½
13	27·685	3·129	30·815	4·173	24·556	2·086	19·861	·521	13
13½	29·125	3·375	32·500	4·500	25·750	2·250	20·687	·562	13½
14	30·592	3·630	34·222	4·839	26·963	2·419	21·519	·605	14
14½	32·088	3·894	35·981	5·191	28·194	2·596	22·354	·649	14½
15	33·611	4·167	37·778	5·556	29·444	2·778	23·194	·694	15
15½	35·162	4·449	39·611	5·933	30·713	2·966	24·039	·741	15½
16	36·740	4·741	41·481	6·321	32·000	3·161	24·889	·790	16
16½	38·347	5·042	43·389	6·723	33·306	3·361	25·743	·840	16½
17	39·982	5·352	45·333	7·136	34·630	3·568	26·602	·892	17
17½	41·643	5·671	47·315	7·562	35·972	3·781	27·465	·945	17½
18	43·333	6·000	49·333	8·000	37·333	4·000	28·333	1·000	18
18½	45·051	6·338	51·389	8·451	38·713	4·225	29·206	1·056	18½
19	46·796	6·685	53·481	8·913	40·111	4·457	30·083	1·114	19
19½	48·569	7·042	55·611	9·389	41·528	4·695	30·965	1·174	19½
20	50·370	7·407	57·778	9·877	42·963	4·939	31·852	1·235	20
20½	52·200	7·782	59·981	10·377	44·417	5·188	32·743	1·297	20½
21	54·056	8·167	62·222	10·889	45·889	5·444	33·639	1·361	21
21½	55·939	8·560	64·500	11·413	47·379	5·707	34·539	1·427	21½
22	57·852	8·963	66·815	11·951	48·889	5·975	35·444	1·494	22
22½	59·792	9·375	69·167	12·500	50·417	6·250	36·354	1·562	22½
23	61·759	9·796	71·556	13·061	51·963	6·531	37·268	1·633	23
23½	63·755	10·227	73·981	13·636	53·528	6·818	38·187	1·705	23½
24	65·778	10·667	76·444	14·222	55·111	7·111	39·111	1·778	24
24½	67·829	11·116	78·944	14·821	56·713	7·411	40·039	1·853	24½
25	69·907	11·574	81·481	15·432	58·333	7·716	40·972	1·929	25
25½	72·014	12·042	84·056	16·056	59·972	8·028	41·910	2·007	25½
26	74·148	12·518	86·667	16·691	61·630	8·347	42·852	2·086	26
26½	76·310	13·004	89·315	17·339	63·306	8·670	43·799	2·167	26½
27	78·500	13·500	92·000	18·000	65·000	9·000	44·750	2·250	27
27½	80·718	14·004	94·722	18·672	66·713	9·336	45·706	2·334	27½
28	82·963	14·518	97·481	19·357	68·444	9·679	46·667	2·420	28
28½	85·236	15·042	100·278	20·056	70·194	10·028	47·632	2·507	28½
29	87·537	15·574	103·111	20·765	71·963	10·383	48·602	2·596	29
29½	89·866	16·116	105·981	21·488	73·750	10·744	49·576	2·686	29½
30	92·222	16·667	108·889	22·222	75·556	11·111	50·556	2·778	30

TABLE XXXIII.—Base 40 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
30½	96·865	17·227	114·093	22·970	79·639	11·485	53·799	2·871	30½
31	99·315	17·796	117·111	23·728	81·519	11·864	54·824	2·966	31
31½	101·791	18·375	120·167	24·500	83·416	12·250	55·854	3·062	31½
32	104·296	18·963	123·259	25·284	85·333	12·642	56·889	3·160	32
32½	106·828	19·560	126·389	26·080	87·268	13·040	57·928	3·260	32½
33	109·389	20·167	129·556	26·889	89·222	13·444	58·972	3·361	33
33½	111·977	20·782	132·759	27·709	91·194	13·855	60·021	3·464	33½
34	114·592	21·407	136·000	28·543	93·185	14·272	61·074	3·568	34
34½	117·235	22·042	139·278	29·389	95·194	14·694	62·132	3·674	34½
35	119·906	22·685	142·593	30·247	97·222	15·123	63·194	3·781	35
35½	122·606	23·338	145·944	31·117	99·268	15·559	64·262	3·890	35½
36	125·333	24·000	149·333	32·000	101·333	16·000	65·333	4·000	36
36½	128·087	24·671	152·759	32·895	103·416	16·447	66·410	4·112	36½
37	130·870	25·352	156·222	33·802	105·519	16·901	67·491	4·225	37
37½	133·679	26·042	159·722	34·722	107·639	17·361	68·576	4·340	37½
38	136·518	26·741	163·259	35·654	109·778	17·827	69·667	4·457	38
38½	139·383	27·449	166·833	36·599	111·935	18·299	70·762	4·575	38½
39	142·278	28·167	170·444	37·556	114·111	18·778	71·861	4·694	39
39½	145·199	28·894	174·093	38·525	116·305	19·263	72·965	4·816	39½
40	148·147	29·630	177·778	39·506	118·519	19·753	74·073	4·938	40
40½	151·125	30·375	181·500	40·500	120·750	20·250	75·187	5·062	40½
41	154·129	31·129	185·259	41·506	123·000	20·753	76·306	5·188	41
41½	157·161	31·894	189·056	42·525	125·268	21·263	77·428	5·316	41½
42	160·222	32·667	192·889	43·556	127·556	21·778	78·556	5·444	42
42½	163·309	33·449	196·759	44·599	129·861	22·299	79·687	5·575	42½
43	166·425	34·241	200·667	45·654	132·185	22·827	80·824	5·707	43
43½	169·569	35·042	204·611	46·722	134·528	23·361	81·965	5·840	43½
44	172·740	35·852	208·592	47·802	136·889	23·901	83·111	5·975	44
44½	175·939	36·671	212·611	48·895	139·269	24·447	84·262	6·112	44½
45	179·167	37·500	216·667	50·000	141·667	25·000	85·417	6·250	45
45½	182·421	38·338	220·759	51·117	144·083	25·559	86·576	6·390	45½
46	185·704	39·185	224·889	52·247	146·519	26·123	87·741	6·531	46
46½	189·014	40·042	229·056	53·389	148·972	26·694	88·910	6·673	46½
47	192·352	40·907	233·259	54·543	151·444	27·272	90·083	6·818	47
47½	195·717	41·782	237·500	55·709	153·935	27·855	91·261	6·964	47½
48	199·111	42·667	241·778	56·889	156·444	28·444	92·444	7·111	48
48½	202·531	43·560	246·093	58·080	158·972	29·040	93·632	7·260	48½
49	205·981	44·463	250·444	59·284	161·519	29·642	94·824	7·410	49
49½	209·457	45·375	254·833	60·500	164·083	30·250	96·021	7·562	49½
50	212·962	46·296	259·259	61·728	166·667	30·864	97·222	7·716	50
50½	216·497	47·227	263·722	62·970	169·269	31·485	98·428	7·871	50½
51	220·056	48·167	268·222	64·222	171·889	32·111	99·639	8·028	51
51½	223·644	49·116	272·759	65·488	174·528	32·744	100·854	8·186	51½
52	227·260	50·074	277·333	66·765	177·185	33·383	102·074	8·346	52
52½	230·904	51·042	281·944	68·056	179·861	34·028	103·298	8·507	52½
53	234·574	52·018	286·593	69·357	182·556	34·679	104·527	8·670	53
53½	238·273	53·004	291·278	70·672	185·268	35·336	105·762	8·834	53½
54	242·000	54·000	296·000	72·000	188·000	36·000	107·000	9·000	54
54½	245·755	55·004	300·759	73·339	190·750	36·670	108·243	9·167	54½
55	249·537	56·018	305·556	74·691	193·519	37·346	109·491	9·336	55
55½	253·347	57·042	310·389	76·056	196·305	38·028	110·743	9·507	55½
56	257·185	58·074	315·259	77·432	199·111	38·716	112·000	9·679	56
56½	261·051	59·116	320·167	78·821	201·935	39·411	113·262	9·853	56½
57	264·944	60·167	325·111	80·222	204·778	40·111	114·527	10·028	57
57½	268·865	61·227	330·093	81·636	207·639	40·818	115·798	10·204	57½
58	272·815	62·296	335·111	83·061	210·519	41·531	117·074	10·383	58
58½	276·791	63·375	340·167	84·500	213·416	42·250	118·354	10·563	58½
59	280·796	64·463	345·259	85·951	216·333	42·975	119·639	10·744	59
59½	284·828	65·560	350·389	87·413	219·268	43·707	120·928	10·927	59½
60	288·889	66·667	355·556	88·889	222·222	44·444	122·222	11·111	60

TABLE XXXIII.—Base 40 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·755	·004	·759	·005	·750	·003	·743	·001	½
1	1·537	·018	1·556	·024	1·519	·012	1·491	·003	1
1½	2·347	·042	2·389	·056	2·306	·028	2·243	·007	1½
2	3·185	·074	3·259	·099	3·111	·049	3·000	·012	2
2½	4·051	·116	4·167	·155	3·935	·077	3·762	·019	2½
3	4·944	·167	5·111	·222	4·778	·111	4·527	·028	3
3½	5·865	·227	6·093	·303	5·638	·151	5·298	·039	3½
4	6·815	·296	7·111	·395	6·518	·197	6·074	·049	4
4½	7·791	·375	8·167	·500	7·417	·250	6·854	·062	4½
5	8·796	·463	9·259	·617	8·333	·309	7·639	·077	5
5½	9·828	·560	10·389	·747	9·268	·374	8·428	·093	5½
6	10·889	·667	11·556	·889	10·222	·444	9·222	·111	6
6½	11·977	·782	12·759	1·044	11·194	·522	10·021	·130	6½
7	13·092	·907	14·000	1·209	12·185	·605	10·824	·151	7
7½	14·235	1·042	15·278	1·389	13·194	·695	11·632	·174	7½
8	15·406	1·185	16·593	1·580	14·222	·790	12·444	·197	8
8½	16·606	1·338	17·944	1·784	15·268	·892	13·261	·223	8½
9	17·833	1·500	19·333	2·000	16·333	1·000	14·083	·250	9
9½	19·087	1·672	20·759	2·229	17·417	1·115	14·910	·279	9½
10	20·370	1·852	22·222	2·470	18·518	1·235	15·741	·309	10
10½	21·679	2·042	23·722	2·723	19·638	1·361	16·576	·340	10½
11	23·018	2·241	25·259	2·988	20·778	1·494	17·417	·373	11
11½	24·384	2·449	26·833	3·265	21·935	1·633	18·262	·408	11½
12	25·778	2·667	28·444	3·556	23·111	1·778	19·111	·444	12
12½	27·199	2·894	30·093	3·859	24·306	1·929	19·965	·482	12½
13	28·647	3·129	31·778	4·173	25·519	2·086	20·824	·521	13
13½	30·125	3·375	33·500	4·500	26·750	2·250	21·687	·562	13½
14	31·629	3·630	35·259	4·839	28·000	2·419	22·556	·605	14
14½	33·161	3·894	37·056	5·191	29·268	2·596	23·428	·649	14½
15	34·722	4·167	38·889	5·556	30·556	2·778	24·306	·694	15
15½	36·309	4·449	40·759	5·933	31·861	2·966	25·187	·741	15½
16	37·925	4·741	42·667	6·321	33·185	3·161	26·073	·790	16
16½	39·569	5·042	44·611	6·723	34·528	3·361	26·965	·840	16½
17	41·240	5·352	46·592	7·136	35·889	3·568	27·861	·892	17
17½	42·939	5·671	48·611	7·562	37·269	3·781	28·762	·945	17½
18	44·667	6·000	50·667	8·000	38·667	4·000	29·667	1·000	18
18½	46·421	6·338	52·759	8·451	40·083	4·225	30·576	1·056	18½
19	48·204	6·685	54·889	8·913	41·519	4·457	31·491	1·114	19
19½	50·014	7·042	57·056	9·389	42·972	4·695	32·410	1·174	19½
20	51·852	7·407	59·259	9·877	44·444	4·939	33·333	1·235	20
20½	53·717	7·782	61·500	10·377	45·935	5·188	34·262	1·297	20½
21	55·611	8·167	63·778	10·889	47·444	5·444	35·194	1·361	21
21½	57·531	8·560	66·093	11·413	48·972	5·707	36·132	1·427	21½
22	59·481	8·963	68·444	11·951	50·519	5·975	37·074	1·494	22
22½	61·457	9·375	70·833	12·500	52·083	6·250	38·021	1·562	22½
23	63·462	9·796	73·259	13·061	53·667	6·531	38·972	1·633	23
23½	65·497	10·227	75·722	13·636	55·268	6·818	39·928	1·705	23½
24	67·556	10·667	78·222	14·222	56·889	7·111	40·889	1·778	24
24½	69·644	11·116	80·759	14·821	58·528	7·411	41·854	1·853	24½
25	71·760	11·574	83·333	15·432	60·185	7·716	42·824	1·929	25
25½	73·904	12·042	85·944	16·056	61·861	8·028	43·799	2·007	25½
26	76·074	12·518	88·593	16·691	63·556	8·347	44·778	2·086	26
26½	78·273	13·004	91·278	17·339	65·268	8·670	45·762	2·167	26½
27	80·500	13·500	94·000	18·000	67·000	9·000	46·750	2·250	27
27½	82·755	14·004	96·759	18·672	68·750	9·336	47·743	2·334	27½
28	85·037	14·518	99·556	19·357	70·519	9·679	48·742	2·420	2
28½	87·347	15·042	102·389	20·056	72·306	10·028	49·743	2·507	28½
29	89·685	15·574	105·259	20·765	74·111	10·383	50·750	2·596	29
29½	92·051	16·116	108·167	21·488	75·935	10·744	51·762	2·686	29½
30	94·444	16·667	111·111	22·222	77·778	11·111	52·778	2·778	30

TABLE XXXIII.—Base 40 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
30½	96·865	17·227	114·093	22·970	79·639	11·485	53·799	2·871	30½
31	99·315	17·796	117·111	23·728	81·519	11·864	54·824	2·966	31
31½	101·791	18·375	120·167	24·500	83·416	12·250	55·854	3·062	31½
32	104·296	18·963	123·259	25·284	85·333	12·642	56·889	3·160	32
32½	106·828	19·560	126·389	26·080	87·268	13·040	57·928	3·260	32½
33	109·389	20·167	129·556	26·889	89·222	13·444	58·972	3·361	33
33½	111·977	20·782	132·759	27·709	91·194	13·855	60·021	3·464	33½
34	114·592	21·407	136·000	28·543	93·185	14·272	61·074	3·568	34
34½	117·235	22·042	139·278	29·389	95·194	14·694	62·132	3·674	34½
35	119·906	22·685	142·593	30·247	97·222	15·123	63·194	3·781	35
35½	122·606	23·338	145·944	31·117	99·268	15·559	64·262	3·890	35½
36	125·333	24·000	149·333	32·000	101·333	16·000	65·333	4·000	36
36½	128·087	24·671	152·759	32·895	103·416	16·447	66·410	4·112	36½
37	130·870	25·352	156·222	33·802	105·519	16·901	67·491	4·225	37
37½	133·679	26·042	159·722	34·722	107·639	17·361	68·576	4·340	37½
38	136·518	26·741	163·259	35·654	109·778	17·827	69·667	4·457	38
38½	139·383	27·449	166·833	36·599	111·935	18·299	70·762	4·575	38½
39	142·278	28·167	170·444	37·556	114·111	18·778	71·861	4·694	39
39½	145·199	28·894	174·093	38·525	116·305	19·263	72·965	4·816	39½
40	148·147	29·630	177·778	39·506	118·519	19·753	74·073	4·938	40
40½	151·125	30·375	181·500	40·500	120·750	20·250	75·187	5·062	40½
41	154·129	31·129	185·259	41·506	123·000	20·753	76·306	5·188	41
41½	157·161	31·894	189·056	42·525	125·268	21·263	77·428	5·316	41½
42	160·222	32·667	192·889	43·556	127·556	21·778	78·556	5·444	42
42½	163·309	33·449	196·759	44·599	129·861	22·299	79·687	5·575	42½
43	166·425	34·241	200·667	45·654	132·185	22·827	80·824	5·707	43
43½	169·569	35·042	204·611	46·722	134·528	23·361	81·965	5·840	43½
44	172·740	35·852	208·592	47·802	136·889	23·901	83·111	5·975	44
44½	175·939	36·671	212·611	48·895	139·269	24·447	84·262	6·112	44½
45	179·167	37·500	216·667	50·000	141·667	25·000	85·417	6·250	45
45½	182·421	38·338	220·759	51·117	144·083	25·559	86·576	6·390	45½
46	185·704	39·185	224·889	52·247	146·519	26·123	87·741	6·531	46
46½	189·014	40·042	229·056	53·389	148·972	26·694	88·910	6·673	46½
47	192·352	40·907	233·259	54·543	151·444	27·272	90·083	6·818	47
47½	195·717	41·782	237·500	55·709	153·935	27·855	91·261	6·964	47½
48	199·111	42·667	241·778	56·889	156·444	28·444	92·444	7·111	48
48½	202·531	43·560	246·093	58·080	158·972	29·040	93·632	7·260	48½
49	205·981	44·463	250·444	59·284	161·519	29·642	94·824	7·410	49
49½	209·457	45·375	254·833	60·500	164·083	30·250	96·021	7·562	49½
50	212·962	46·296	259·259	61·728	166·667	30·864	97·222	7·716	50
50½	216·497	47·227	263·722	62·970	169·269	31·485	98·428	7·871	50½
51	220·056	48·167	268·222	64·222	171·889	32·111	99·639	8·028	51
51½	223·644	49·116	272·759	65·488	174·528	32·744	100·854	8·186	51½
52	227·260	50·074	277·333	66·765	177·185	33·383	102·074	8·346	52
52½	230·904	51·042	281·944	68·056	179·861	34·028	103·298	8·507	52½
53	234·574	52·018	286·593	69·357	182·556	34·679	104·527	8·670	53
53½	238·273	53·004	291·278	70·672	185·268	35·336	105·762	8·834	53½
54	242·000	54·000	296·000	72·000	188·000	36·000	107·000	9·000	54
54½	245·755	55·004	300·759	73·339	190·750	36·670	108·243	9·167	54½
55	249·537	56·018	305·556	74·691	193·519	37·346	109·491	9·336	55
55½	253·347	57·042	310·389	76·056	196·305	38·028	110·743	9·507	55½
56	257·185	58·074	315·259	77·432	199·111	38·716	112·000	9·679	56
56½	261·051	59·116	320·167	78·821	201·935	39·411	113·262	9·853	56½
57	264·944	60·167	325·111	80·222	204·778	40·111	114·527	10·028	57
57½	268·865	61·227	330·093	81·636	207·639	40·818	115·798	10·204	57½
58	272·815	62·296	335·111	83·061	210·519	41·531	117·074	10·383	58
58½	276·791	63·375	340·167	84·500	213·416	42·250	118·354	10·563	58½
59	280·796	64·463	345·259	85·951	216·333	42·975	119·639	10·744	59
59½	284·828	65·560	350·389	87·413	219·268	43·707	120·928	10·927	59½
60	288·889	66·667	355·556	88·889	222·222	44·444	122·222	11·111	60

TABLE XXXIV.—Base 45 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
½	·847	·004	·852	·005	·843	·003	·836	·001	½
1	1·722	·018	1·741	·024	1·704	·012	1·676	·003	1
1½	2·625	·042	2·667	·056	2·583	·028	2·521	·007	1½
2	3·556	·074	3·630	·099	3·481	·049	3·370	·012	2
2½	4·514	·116	4·630	·155	4·398	·077	4·225	·019	2½
3	5·500	·167	5·667	·222	5·333	·111	5·083	·028	3
3½	6·514	·227	6·741	·303	6·287	·151	5·947	·039	3½
4	7·556	·296	7·852	·395	7·259	·197	6·815	·049	4
4½	8·625	·375	9·000	·500	8·250	·250	7·687	·062	4½
5	9·722	·463	10·185	·617	9·259	·309	8·565	·077	5
5½	10·847	·560	11·407	·747	10·287	·374	9·447	·093	5½
6	12·000	·667	12·667	·889	11·333	·444	10·333	·111	6
6½	13·181	·782	13·963	1·044	12·398	·522	11·225	·130	6½
7	14·389	·907	15·296	1·209	13·481	·605	12·120	·151	7
7½	15·625	1·042	16·667	1·389	14·583	·695	13·021	·174	7½
8	16·889	1·185	18·074	1·580	15·704	·790	13·926	·197	8
8½	18·181	1·338	19·519	1·784	16·843	·892	14·836	·223	8½
9	19·500	1·500	21·000	2·000	18·000	1·000	15·750	·250	9
9½	20·847	1·672	22·519	2·229	19·176	1·115	16·669	·279	9½
10	22·222	1·852	24·074	2·470	20·370	1·235	17·593	·309	10
10½	23·625	2·042	25·667	2·723	21·583	1·361	18·521	·340	10½
11	25·056	2·241	27·296	2·988	22·815	1·494	19·454	·373	11
11½	26·514	2·449	28·963	3·265	24·065	1·633	20·391	·408	11½
12	28·000	2·667	30·667	3·556	25·333	1·778	21·333	·444	12
12½	29·514	2·894	32·407	3·859	26·620	1·929	22·280	·482	12½
13	31·056	3·129	34·185	4·173	27·926	2·086	23·231	·521	13
13½	32·625	3·375	36·000	4·500	29·250	2·250	24·187	·562	13½
14	34·222	3·630	37·852	4·839	30·593	2·419	25·148	·605	14
14½	35·847	3·894	39·741	5·191	31·954	2·596	26·113	·649	14½
15	37·500	4·167	41·667	5·556	33·333	2·778	27·083	·694	15
15½	39·181	4·449	43·630	5·933	34·731	2·966	28·058	·741	15½
16	40·889	4·741	45·630	6·321	36·148	3·161	29·037	·790	16
16½	42·625	5·042	47·667	6·723	37·583	3·361	30·021	·840	16½
17	44·389	5·352	49·741	7·136	39·037	3·568	31·009	·892	17
17½	46·181	5·671	51·852	7·562	40·509	3·781	32·002	·945	17½
18	48·000	6·000	54·000	8·000	42·000	4·000	33·000	1·000	18
18½	49·847	6·338	56·185	8·451	43·509	4·225	34·002	1·056	18½
19	51·722	6·685	58·407	8·913	45·037	4·457	35·009	1·114	19
19½	53·625	7·042	60·667	9·389	46·583	4·695	36·021	1·174	19½
20	55·556	7·407	62·963	9·877	48·148	4·939	37·037	1·235	20
20½	57·514	7·782	65·296	10·377	49·731	5·188	38·058	1·297	20½
21	59·500	8·167	67·667	10·889	51·333	5·444	39·083	1·361	21
21½	61·514	8·560	70·074	11·413	52·954	5·707	40·113	1·427	21½
22	63·556	8·963	72·519	11·951	54·593	5·975	41·148	1·494	22
22½	65·625	9·375	75·000	12·500	56·250	6·250	42·187	1·562	22½
23	67·722	9·796	77·519	13·061	57·926	6·531	43·231	1·633	23
23½	69·847	10·227	80·074	13·636	59·620	6·818	44·280	1·705	23½
24	72·000	10·667	82·667	14·222	61·333	7·111	45·333	1·778	24
24½	74·181	11·116	85·296	14·821	63·065	7·411	46·391	1·853	24½
25	76·389	11·574	87·963	15·432	64·815	7·716	47·454	1·929	25
25½	78·625	12·042	90·667	16·056	66·583	8·028	48·521	2·007	25½
26	80·889	12·518	93·407	16·691	68·370	8·347	49·593	2·086	26
26½	83·181	13·004	96·185	17·339	70·176	8·670	50·669	2·167	26½
27	85·500	13·500	99·000	18·000	72·000	9·000	51·750	2·250	27
27½	87·847	14·004	101·852	18·672	73·843	9·336	52·836	2·334	27½
28	90·222	14·518	104·741	19·357	75·704	9·679	53·926	2·420	28
28½	92·625	15·042	107·667	20·056	77·583	10·028	55·021	2·507	28½
29	95·056	15·574	110·630	20·765	79·481	10·383	56·120	2·596	29
29½	97·514	16·116	113·630	21·488	81·398	10·744	57·225	2·686	29½
30	100·000	16·667	116·667	22·222	83·333	11·111	58·333	2·778	30

TABLE XXXIV.—Base 45 Feet.

Depth in feet.	1½ to 1		2 to 1		1 to 1		¼ to 1		Depth in feet.
	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	Centre and Slopes.	Add half difference of heights.	
30½	102·514	17·227	119·741	22·970	85·287	11·485	59·447	2·871	30½
31	105·056	17·796	122·852	23·728	87·259	11·864	60·565	2·966	31
31½	107·625	18·375	126·000	24·500	89·250	12·250	61·687	3·062	31½
32	110·222	18·963	129·185	25·284	91·259	12·642	62·815	3·160	32
32½	112·847	19·560	132·407	26·080	93·287	13·040	63·947	3·260	32½
33	115·500	20·167	135·667	26·889	95·333	13·444	65·083	3·361	33
33½	118·181	20·782	138·963	27·709	97·398	13·855	66·225	3·464	33½
34	120·889	21·407	142·296	28·543	99·481	14·272	67·370	3·568	34
34½	123·625	22·042	145·667	29·389	101·583	14·694	68·521	3·674	34½
35	126·389	22·685	149·074	30·247	103·704	15·123	69·676	3·781	35
35½	129·181	23·338	152·519	31·117	105·843	15·559	70·836	3·890	35½
36	132·000	24·000	156·000	32·000	108·000	16·000	72·000	4·000	36
36½	134·847	24·671	159·519	32·895	110·176	16·447	73·169	4·112	36½
37	137·722	25·352	163·074	33·802	112·370	16·901	74·343	4·225	37
37½	140·625	26·042	166·667	34·722	114·583	17·361	75·521	4·340	37½
38	143·556	26·741	170·296	35·654	116·815	17·827	76·704	4·457	38
38½	146·514	27·449	173·963	36·599	119·065	18·299	77·891	4·575	38½
39	149·500	28·167	177·667	37·556	121·333	18·778	79·083	4·694	39
39½	152·514	28·894	181·407	38·525	123·620	19·263	80·280	4·816	39½
40	155·556	29·630	185·185	39·506	125·926	19·753	81·481	4·938	40
40½	158·625	30·375	189·000	40·500	128·250	20·250	82·687	5·062	40½
41	161·722	31·129	192·852	41·506	130·593	20·753	83·898	5·188	41
41½	164·847	31·894	196·741	42·525	132·954	21·263	85·113	5·316	41½
42	168·000	32·667	200·667	43·556	135·333	21·778	86·333	5·444	42
42½	171·181	33·449	204·630	44·599	137·731	22·299	87·558	5·575	42½
43	174·389	34·241	208·630	45·654	140·148	22·827	88·787	5·707	43
43½	177·625	35·042	212·667	46·722	142·583	23·361	90·021	5·840	43½
44	180·889	35·852	216·741	47·802	145·037	23·901	91·259	5·975	44
44½	184·181	36·671	220·852	48·895	147·509	24·447	92·502	6·112	44½
45	187·500	37·500	225·000	50·000	150·000	25·000	93·750	6·250	45
45½	190·847	38·338	229·185	51·117	152·509	25·559	95·002	6·390	45½
46	194·222	39·185	233·407	52·247	155·037	26·123	96·259	6·531	46
46½	197·625	40·042	237·667	53·389	157·583	26·694	97·521	6·673	46½
47	201·056	40·907	241·963	54·543	160·148	27·272	98·787	6·818	47
47½	204·514	41·782	246·296	55·709	162·731	27·855	100·058	6·964	47½
48	208·000	42·667	250·667	56·889	165·333	28·444	101·333	7·111	48
48½	211·514	43·560	255·074	58·080	167·954	29·040	102·613	7·260	48½
49	215·056	44·463	259·519	59·284	170·593	29·642	103·898	7·410	49
49½	218·625	45·375	264·000	60·500	173·250	30·250	105·187	7·562	49½
50	222·222	46·296	268·519	61·728	175·926	30·864	106·481	7·716	50
50½	225·847	47·227	273·074	62·970	178·620	31·485	107·780	7·871	50½
51	229·500	48·167	277·667	64·222	181·333	32·111	109·083	8·028	51
51½	233·181	49·116	282·296	65·488	184·065	32·744	110·391	8·186	51½
52	236·889	50·074	286·963	66·765	186·815	33·383	111·704	8·346	52
52½	240·625	51·042	291·667	68·056	189·583	34·028	113·021	8·507	52½
53	244·389	52·018	296·407	69·357	192·370	34·679	114·343	8·670	53
53½	248·181	53·004	301·185	70·672	195·176	35·336	115·669	8·834	53½
54	252·000	54·000	306·000	72·000	198·000	36·000	117·000	9·000	54
54½	255·847	55·004	310·852	73·339	200·843	36·670	118·336	9·167	54½
55	259·722	56·018	315·741	74·691	203·704	37·346	119·676	9·336	55
55½	263·625	57·042	320·667	76·056	206·583	38·028	121·021	9·507	55½
56	267·556	58·074	325·630	77·432	209·481	38·716	122·370	9·679	56
56½	271·514	59·116	330·630	78·821	212·398	39·411	123·725	9·853	56½
57	275·500	60·167	335·667	80·222	215·333	40·111	125·083	10·028	57
57½	279·514	61·227	340·741	81·636	218·287	40·818	126·447	10·204	57½
58	283·556	62·296	345·852	83·061	221·259	41·531	127·815	10·383	58
58½	287·625	63·375	351·000	84·500	224·250	42·250	129·187	10·563	58½
59	291·722	64·463	356·185	85·951	227·259	42·975	130·565	10·744	59
59½	295·847	65·560	361·407	87·413	230·287	43·707	131·947	10·927	59½
60	300·000	66·667	366·667	88·889	233·333	44·444	133·333	11·111	60

OPES NLY.	ADD HALF DIFFERENCE OF HEIGHTS WHEN BASES HAVE SLOPES OF—						Depths in feet.
TO 1	½ TO 1	¾ TO 1	1¼ TO 1	1¾ TO 1	2½ TO 1	3 TO 1	
6134	5·742	8·613	14·355	20·098	28·712	34·454	30½
8981	5·932	8·898	14·830	20·762	29·660	35·592	31
1875	6·125	9·187	15·312	21·437	30·624	36·750	31½
4815	6·321	9·481	15·802	22·123	31·604	37·926	32
7801	6·520	9·780	16·300	22·820	32·600	39·120	32½
0833	6·722	10·083	16·805	23·527	33·610	40·333	33
3912	6·927	10·391	17·318	24·246	34·638	41·565	33½
7037	7·136	10·704	17·840	24·976	35·679	42·815	34
0208	7·347	11·021	18·368	25·715	36·735	44·083	34½
3426	7·562	11·343	18·905	26·467	37·809	45·370	35
6690	7·779	11·669	19·448	27·227	38·896	46·676	35½
0000	8·000	12·000	20·000	28·000	40·000	48·000	36
3356	8·224	12·336	20·560	28·784	41·119	49·343	36½
6759	8·451	12·676	21·127	29·578	42·253	50·704	37
0208	8·681	13·021	21·702	30·383	43·403	52·083	37½
3704	8·914	13·370	22·284	31·198	44·568	53·481	38
7245	9·150	13·724	22·874	32·024	45·748	54·898	38½
0833	9·389	14·083	23·472	32·861	46·944	56·333	39
4468	9·631	14·447	24·078	33·709	48·155	57·788	39½
8148	9·877	14·815	24·692	34·569	49·383	59·259	40
1875	10·125	15·187	25·312	35·437	50·624	60·750	40½
5648	10·377	15·565	25·942	36·319	51·883	62·259	41
9467	10·631	15·947	26·578	37·210	53·156	63·788	41½
3333	10·889	16·333	27·222	38·111	54·444	65·333	42
7245	11·150	16·724	27·874	39·024	55·748	66·898	42½
1204	11·414	17·120	28·534	39·948	57·068	68·481	43
5208	11·681	17·521	29·202	40·883	58·403	70·083	43½
9259	11·951	17·926	29·877	41·828	59·753	71·704	44
3356	12·224	18·336	30·560	42·784	61·119	73·343	44½
7500	12·500	18·750	31·250	43·750	62·500	75·000	45
1690	12·779	19·169	31·948	44·727	63·896	76·676	45½
5926	13·062	19·593	32·655	45·717	65·309	78·370	46
0208	13·347	20·021	33·368	46·715	66·735	80·083	46½
4537	13·636	20·454	34·090	47·726	68·179	81·815	47
8912	13·927	20·891	34·818	48·746	69·638	83·565	47½
3333	14·222	21·333	35·556	49·778	71·111	85·333	48
7801	14·520	21·780	36·300	50·820	72·600	87·120	48½
2315	14·821	22·231	37·052	51·873	74·104	88·926	49
6875	15·125	22·687	37·812	52·937	75·624	90·750	49½
1481	15·432	23·148	38·580	54·012	77·160	92·592	50
6134	15·742	23·613	39·355	55·098	78·712	94·454	50½
0833	16·056	24·083	40·139	56·195	80·278	96·333	51
5579	16·372	24·558	40·930	57·302	81·859	98·232	51½
0370	16·691	25·037	41·728	58·419	83·456	100·148	52
5208	17·014	25·521	42·535	59·549	85·069	102·083	52½
0093	17·339	26·009	43·348	60·687	86·696	104·036	53
5023	17·668	26·502	44·170	61·838	88·340	106·008	53½
0000	18·000	27·000	45·000	63·000	90·000	108·000	54
5023	18·335	27·502	45·837	64·172	91·674	110·008	54½
0093	18·673	28·009	46·682	65·355	93·364	112·036	55
5208	19·014	28·521	47·535	66·549	95·069	114·083	55½
0370	19·358	29·037	48·395	67·753	96·790	116·148	56
5579	19·705	29·558	49·263	68·968	98·527	118·232	56½
0833	20·056	30·083	50·139	70·196	100·278	120·333	57
6134	20·409	30·613	51·022	71·431	102·044	122·454	57½
1481	20·765	31·148	51·913	72·678	103·826	124·592	58
6875	21·125	31·687	52·812	73·937	105·624	126·750	58½
2315	21·488	32·231	53·719	75·207	107·438	128·926	59
7801	21·853	32·780	54·633	76·486	109·266	131·120	59½
3333	22·222	33·333	55·556	77·778	111·111	133·333	60

Diff. of readths × Diff. of Heights.	Tabular Numbers.	Diff. of Breadths × Diff. of Heights.	Tabular Numbers.	Diff. of Breadths × Diff. of Heights.	Tabular Numbers.
q. Feet.	Cubic Yards.	Sq. Feet.	Cubic Yards.	Sq. Feet.	Cubic Yards.
51	·157	104	·321	157	·484
52	·160	105	·324	158	·487
53	·164	106	·327	159	·491
54	·167	107	·330	160	·494
55	·170	108	·333	161	·497
56	·173	109	·336	162	·500
57	·176	110	·339	163	·503
58	·179	111	·343	164	·506
59	·182	112	·346	165	·509
60	·185	113	·349	166	·512
61	·188	114	·352	167	·515
62	·191	115	·355	168	·518
63	·194	116	·358	169	·522
64	·198	117	·361	170	·525
65	·201	118	·364	171	·528
66	·204	119	·367	172	·531
67	·207	120	·370	173	·534
68	·210	121	·373	174	·537
69	·213	122	·376	175	·540
70	·216	123	·380	176	·543
71	·219	124	·383	177	·547
72	·222	125	·386	178	·550
73	·225	126	·389	179	·553
74	·228	127	·392	180	·556
75	·231	128	·395	181	·559
76	·235	129	·398	182	·562
77	·238	130	·401	183	·565
78	·241	131	·404	184	·568
79	·244	132	·407	185	·571
80	·247	133	·410	186	·574
81	·250	134	·414	187	·577
82	·253	135	·417	188	·581
83	·256	136	·420	189	·584
84	·259	137	·423	190	·587
85	·262	138	·426	191	·590
86	·265	139	·429	192	·593
87	·268	140	·432	193	·596
88	·272	141	·435	194	·599
89	·275	142	·438	195	·602
90	·278	143	·441	196	·605
91	·281	144	·444	197	·608
92	·284	145	·447	198	·611
93	·287	146	·451	199	·614
94	·290	147	·454	200	·617
95	·293	148	·457	210	·648
96	·296	149	·460	220	·679
97	·299	150	·463	230	·710
98	·302	151	·466	240	·741
99	·306	152	·469	250	·772
100	·309	153	·472	300	·926
101	·312	154	·475	400	1·235
102	·315	155	·478	500	1·544
103	·318	156	·481	600	1·853

numbers are to be added when Base and Height are greatest at the end, and subtracted when greatest at opposite ends.

TABLE XXXVI.—Co-efficient Depths for Tracing Papers.

Cubic Content.	Spaces, 100 Feet in length; Slopes, 1½ to 1; Bases in Feet:—								
	11	12	13	14	15	16	17	18	20
Cub. yds.	Ft. Decs.	Ft. Decs.	Ft. Decs.	Ft. Decs.	Ft. Decs.	Ft. Decs.	Ft. Decs.	Ft. Decs.	Ft. Decs.
200	3·36	3·21	3·07	2·94	2·81	2·70	2·59	2·49	2·30
400	5·58	5·38	5·20	5·03	4·85	4·69	4·54	4·39	4·12
600	7·35	7·14	6·93	6·73	6·53	6·35	6·17	6·00	5·68
800	8·88	8·65	8·42	8·21	8·00	7·80	7·61	7·42	7·03
1,000	10·24	10·00	9·76	9·54	9·32	9·11	8·90	8·70	8·31
1,200	11·46	11·23	10·99	10·76	10·52	10·30	10·09	9·87	9·47
1,400	12·60	12·37	12·12	11·88	11·64	11·41	11·20	10·97	10·54
1,600	13·69	13·44	13·18	12·94	12·69	12·46	12·23	12·00	11·56
1,800	14·71	14·44	14·18	13·93	13·68	13·45	13·21	12·97	12·52
2,000	15·66	15·39	15·13	14·88	14·62	14·38	14·14	13·90	13·44
2,500	17·86	17·59	17·32	17·06	16·79	16·54	16·30	16·05	15·57
3,000	19·86	19·58	19·30	19·04	18·77	18·51	18·26	18·00	17·53
3,500	21·70	21·42	21·14	20·86	20·59	20·33	20·07	19·81	19·31
4,000	23·42	23·13	22·85	22·57	22·29	22·04	21·78	21·50	20·99
4,500	25·03	24·74	24·46	24·18	23·90	23·63	23·36	23·09	22·57
5,000	26·56	26·26	25·98	25·69	25·41	25·13	24·87	24·59	24·07
5,500	28·01	27·72	27·44	27·15	26·86	26·58	26·31	26·03	25·49
6,000	29·40	29·11	28·83	28·54	28·24	27·96	27·69	27·41	26·86
6,500	30·73	30·44	30·15	29·86	29·57	29·29	29·01	28·73	28·17
7,000	32·02	31·72	31·43	31·14	30·85	30·57	30·29	30·00	29·44
7,500	33·26	32·96	32·67	32·38	32·08	31·80	31·51	31·22	30·66
8,000	34·46	34·16	33·87	33·57	33·28	32·99	32·71	32·42	31·86
8,500	35·62	35·32	35·02	34·73	34·43	34·14	33·86	33·57	33·01
9,000	36·75	36·45	36·15	35·85	35·56	35·27	34·99	34·69	34·13
9,500	37·85	37·55	37·25	36·95	36·65	36·36	36·08	35·78	35·23
10,000	38·92	38·62	38·32	38·02	37·72	37·43	37·14	36·85	36·28
11,000	40·98	40·68	40·38	40·08	39·78	39·48	39·20	38·90	38·33
12,000	42·95	42·65	42·35	42·05	41·74	41·45	41·15	40·86	40·28
13,000	44·84	44·54	44·24	43·94	43·63	43·33	43·04	42·74	42·17
14,000	46·67	46·37	46·07	45·76	45·45	45·15	44·86	44·56	43·97
15,000	48·42	48·11	47·81	47·51	47·20	46·90	46·61	46·31	45·72
16,000	50·12	49·82	49·52	49·21	48·90	48·60	48·31	48·00	47·41
17,000	51·77	51·47	51·16	50·85	50·54	50·24	49·95	49·64	49·05
18,000	53·37	53·07	52·76	52·44	52·14	51·84	51·53	51·24	50·64
19,000	54·92	54·62	54·31	54·00	53·69	53·39	53·10	52·79	52·19
20,000	56·44	56·05	55·77	55·49	55·21	54·90	54·60	54·30	53·70
21,000	57·92	57·62	57·31	57·00	56·68	56·38	56·08	55·77	55·18
22,000	59·36	59·06	58·75	58·44	58·13	57·82	57·53	57·21	56·61
23,000	60·77	60·47	60·15	59·84	59·53	59·23	58·93	58·62	58·01
24,000	62·15	61·85	61·54	61·22	60·91	60·61	60·31	60·00	59·39
25,000	63·50	63·20	62·89	62·58	62·27	61·96	61·66	61·35	60·74
26,000	64·84	64·54	64·22	63·90	63·59	63·30	63·00	62·67	62·08
28,000	67·47	67·17	66·84	66·51	66·17	65·86	65·55	65·25	64·63
30,000	69·91	69·59	69·28	68·97	68·66	68·35	68·04	67·73	67·12

TABLE XXXVI.—Co-efficient Depths for Tracing Papers.

Cubic Content.	Spaces, 100 Feet in length; Slopes, 1½ to 1; Bases in Feet:—								
	21	22	23	24	25	26	27	28	30
Cub. yds.	Ft. Decs.	Ft. Decs.	Ft. Decs.	Ft. Decs.	Ft. Decs.	Ft. Decs.	Ft. Decs.	Ft. Decs.	Ft. Decs.
200	2·22	2·14	2·07	2·00	1·93	1·87	1·82	1·77	1·66
400	4·00	3·88	3·77	3·66	3·56	3·46	3·37	3·29	3·11
600	5·53	5·38	5·24	5·11	4·99	4·87	4·75	4·65	4·42
800	6·89	6·73	6·57	6·42	6·28	6·14	6·00	5·88	5·62
1,000	8·13	7·95	7·78	7·62	7·46	7·31	7·16	7·02	6·73
1,200	9·28	9·09	8·95	8·73	8·56	8·40	8·23	8·09	7·78
1,400	10·35	10·15	9·96	9·78	9·60	9·42	9·25	9·09	8·76
1,600	11·36	11·15	10·95	10·76	10·57	10·39	10·21	10·05	9·70
1,800	12·31	12·11	11·90	11·70	11·50	11·31	11·12	10·95	10·59
2,000	13·22	13·00	12·79	12·59	12·39	12·19	12·00	11·82	11·45
2,500	15·33	15·10	14·88	14·67	14·46	14·25	14·05	13·85	13·45
3,000	17·27	17·03	16·80	16·58	16·35	16·13	15·92	15·72	15·30
3,500	19·06	18·81	18·57	18·34	18·11	17·89	17·67	17·46	17·02
4,000	20·74	20·49	20·24	20·00	19·76	19·53	19·31	19·09	18·64
4,500	22·31	22·05	21·80	21·56	21·32	21·08	20·85	20·63	20·17
5,000	23·81	23·55	23·29	23·05	22·80	22·56	22·33	22·09	21·62
5,500	25·23	24·97	24·71	24·47	24·22	23·97	23·73	23·49	23·02
6,000	26·60	26·33	26·07	25·82	25·57	25·32	25·08	24·84	24·35
6,500	27·91	27·64	27·38	27·13	26·87	26·61	26·37	26·13	25·63
7,000	29·18	28·91	28·65	28·39	28·13	27·87	27·62	27·38	26·88
7,500	30·40	30·13	29·86	29·60	29·34	29·08	28·83	28·58	28·08
8,000	31·59	31·31	31·04	30·78	30·51	30·25	30·00	29·75	29·24
8,500	32·74	32·46	32·19	31·92	31·65	31·39	31·14	30·89	30·37
9,000	33·86	33·58	33·31	33·04	32·77	32·50	32·24	31·99	31·47
9,500	34·95	34·67	34·39	34·12	33·85	33·58	33·32	33·06	32·55
10,000	36·00	35·72	35·44	35·16	34·89	34·63	34·37	34·11	33·59
11,000	38·05	37·77	37·49	37·21	36·93	36·66	36·40	36·14	35·61
12,000	40·00	39·72	39·44	39·16	38·88	38·61	38·34	38·08	37·54
13,000	41·88	41·60	41·32	41·04	40·75	40·47	40·20	39·94	39·40
14,000	43·68	43·40	43·11	42·83	42·55	42·27	42·00	41·73	41·19
15,000	45·43	45·14	44·86	44·58	44·29	44·01	43·74	43·47	42·92
16,000	47·12	46·83	46·54	46·25	45·97	45·69	45·42	45·14	44·59
17,000	48·76	48·47	48·18	47·89	47·60	47·32	47·04	46·77	46·21
18,000	50·35	50·06	49·77	49·48	49·19	48·91	48·63	48·35	47·79
19,000	51·90	51·61	51·32	51·03	50·74	50·45	50·17	49·89	49·33
20,000	53·40	53·11	52·82	52·53	52·24	51·95	51·67	51·39	50·83
21,000	54·88	54·59	54·30	54·00	53·71	53·42	53·14	52·86	52·29
22,000	56·32	56·02	55·72	55·43	55·14	54·85	54·57	54·29	53·72
23,000	57·72	57·42	57·12	56·83	56·54	56·25	55·97	55·69	55·12
24,000	59·10	58·80	58·50	58·21	57·92	57·63	57·34	57·06	56·48
25,000	60·44	60·14	59·85	59·56	59·27	58·98	58·68	58·39	57·82
26,000	61·79	61·49	61·19	60·89	60·59	60·29	60·00	59·72	59·14
28,000	64·34	64·04	63·74	63·44	63·14	62·85	62·56	62·27	61·69
30,000	66·82	66·52	66·22	65·92	65·62	65·32	65·03	64·74	64·16

TABLE XXXVII.—English Acres.

Base or Sum of Heights.	Decimals of an Acre per 100 Lineal Feet.	Base or Sum of Heights.	Decimals of an Acre per 100 Lineal Feet.	Base or Sum of Heights.	Decimals of an Acre per 100 Lineal Feet.	Base or Sum of Heights.	Decimals of an Acre per 100 Lineal Feet.	Base or Sum of Heights.	Decimals of an Acre per 100 Lineal Feet.	Base or Sum of Heights.	Decimals of an Acre per 100 Lineal Feet.
¼	·0006	10¾	·0246	21¼	·0488	31¾	·0728	42¼	·0970	52¾	·1211
½	·0011	11	·0252	½	·0494	32	·0734	½	·0976	53	·1216
¾	·0017	¼	·0258	¾	·0499	¼	·0740	¾	·0981	¼	·1222
1	·0023	½	·0263	22	·0505	½	·0746	43	·0987	½	·1228
¼	·0029	¾	·0269	¼	·0511	¾	·0751	¼	·0993	¾	·1234
½	·0034	12	·0275	½	·0517	33	·0757	½	·0999	54	·1239
¾	·0040	¼	·0281	¾	·0522	¼	·0763	¾	·1004	¼	·1245
2	·0046	½	·0287	23	·0528	½	·0769	44	·1010	½	·1251
¼	·0052	¾	·0292	¼	·0534	¾	·0774	¼	·1016	¾	·1257
½	·0058	13	·0298	½	·0540	34	·0780	½	·1022	55	·1262
¾	·0063	¼	·0304	¾	·0545	¼	·0786	¾	·1027	¼	·1268
3	·0069	½	·0310	24	·0551	½	·0792	45	·1033	½	·1274
¼	·0075	¾	·0315	¼	·0557	¾	·0797	¼	·1039	¾	·1280
½	·0080	14	·0321	½	·0562	35	·0803	½	·1045	56	·1285
¾	·0086	¼	·0327	¾	·0568	¼	·0809	¾	·1050	¼	·1291
4	·0092	½	·0333	25	·0574	½	·0815	46	·1056	½	·1297
¼	·0098	¾	·0338	¼	·0579	¾	·0820	¼	·1062	¾	·1303
½	·0103	15	·0344	½	·0585	36	·0826	½	·1068	57	·1308
¾	·0109	¼	·0350	¾	·0591	¼	·0832	¾	·1073	¼	·1314
5	·0115	½	·0356	26	·0597	½	·0838	47	·1079	½	·1320
¼	·0120	¾	·0361	¼	·0602	¾	·0843	¼	·1085	¾	·1326
½	·0126	16	·0367	½	·0608	37	·0849	½	·1091	58	·1331
¾	·0132	¼	·0373	¾	·0614	¼	·0855	¾	·1096	¼	·1337
6	·0138	½	·0379	27	·0620	½	·0861	48	·1102	½	·1343
¼	·0143	¾	·0384	¼	·0625	¾	·0866	¼	·1108	¾	·1348
½	·0149	17	·0390	½	·0631	38	·0872	½	·1114	59	·1354
¾	·0155	¼	·0396	¾	·0637	¼	·0878	¾	·1119	¼	·1360
7	·0161	½	·0402	28	·0643	½	·0884	49	·1125	½	·1366
¼	·0166	¾	·0407	¼	·0648	¾	·0889	¼	·1130	¾	·1371
½	·0172	18	·0413	½	·0654	39	·0895	½	·1136	60	·1377
¾	·0178	¼	·0419	¾	·0659	¼	·0901	¾	·1141	70	·1607
8	·0184	½	·0425	29	·0665	½	·0907	50	·1147	80	·1837
¼	·0189	¾	·0430	¼	·0671	¾	·0912	¼	·1153	90	·2066
½	·0194	19	·0436	½	·0677	40	·0918	½	·1159	100	·2296
¾	·0200	¼	·0442	¾	·0682	¼	·0924	¾	·1165	200	·4592
9	·0207	½	·0448	30	·0688	½	·0930	51	·1170	300	·6888
¼	·0212	¾	·0453	¼	·0694	¾	·0935	¼	·1176	400	·9184
½	·0217	20	·0459	½	·0700	41	·0941	½	·1182	500	1·1480
¾	·0223	¼	·0465	¾	·0705	¼	·0947	¾	·1188	600	1·3775
10	·0230	½	·0471	31	·0711	½	·0953	52	·1193	700	1·6071
¼	·0235	¾	·0476	¼	·0717	¾	·0958	¼	·1199	800	1·8366
½	·0241	21	·0482	½	·0723	42	·0964	½	·1205	900	2·0661

Note.—One English Acre = 43,560 English square feet = 4,840 square yards = 100,000 square links = 10 square chains = 160 square poles = 4 square roods.

TABLE XXXVIII.—Multipliers when the Surface slopes transversely.

Slopes of Cuttings and Embankments.	Transverse Slopes of Surface of Ground.							
	1 in 3	1 in 4	1 in 5	1 in 6	1 in 7	1 in 8	1 in 9	1 in 10
½ to 1	0·517	·510	·504	·503	·503	·502	·502	·501
1 to 1	1·128	1·070	1·042	1·028	1·020	1·016	1·013	1·010
1½ to 1	2·010	1·750	1·652	1·600	1·568	1·554	1·543	1·534
2 to 1	3·604	2·668	2·386	2·250	2·172	2·130	2·105	2·084
2½ to 1	...	4·106	3·345	3·032	2·852	2·768	2·712	2·669
3 to 1	...	...	4·715	3·994	3·651	3·487	3·375	3·300

TABLE XXXVII.—Irish Acres.

Base or Sum of Heights.	Decimals of an Acre per 100 Lineal Feet.	Base or Sum of Heights.	Decimals of an Acre per 100 Lineal Feet.	Base or Sum of Heights.	Decimals of an Acre per 100 Lineal Feet.	Base or Sum of Heights.	Decimals of an Acre per 100 Lineal Feet.	Base or Sum of Heights.	Decimals of an Acre per 100 Lineal Feet.	Base or Sum of Heights.	Decimals of an Acre per 100 Lineal Feet.
¼	·0004	10¾	·0153	21¼	·0301	31¾	·0450	42¼	·0599	52¾	·0747
½	·0007	11	·0156	½	·0305	32	·0453	½	·0602	53	·0751
¾	·0011	¼	·0160	¾	·0308	¼	·0457	¾	·0606	¼	·0754
1	·0014	½	·0163	22	·0312	½	·0460	43	·0609	½	·0758
¼	·0018	¾	·0167	¼	·0315	¾	·0464	¼	·0613	¾	·0761
½	·0021	12	·0170	½	·0318	33	·0468	½	·0617	54	·0765
¾	·0025	¼	·0174	¾	·0322	¼	·0471	¾	·0620	¼	·0769
2	·0028	½	·0177	23	·0326	½	·0475	44	·0624	½	·0772
¼	·0032	¾	·0181	¼	·0330	¾	·0478	¼	·0627	¾	·0775
½	·0035	13	·0184	½	·0333	34	·0482	½	·0630	55	·0779
¾	·0039	¼	·0188	¾	·0337	¼	·0486	¾	·0634	¼	·0783
3	·0043	½	·0191	24	·0340	½	·0489	45	·0638	½	·0786
¼	·0047	¾	·0195	¼	·0344	¾	·0493	¼	·0642	¾	·0790
½	·0050	14	·0198	½	·0347	35	·0496	½	·0645	56	·0793
¾	·0054	¼	·0202	¾	·0351	¼	·0500	¾	·0648	¼	·0797
4	·0057	½	·0206	25	·0354	½	·0503	46	·0652	½	·0800
¼	·0061	¾	·0209	¼	·0358	¾	·0507	¼	·0655	¾	·0804
½	·0064	15	·0213	½	·0362	36	·0510	½	·0659	57	·0807
¾	·0068	¼	·0216	¾	·0365	¼	·0514	¾	·0663	¼	·0811
5	·0071	½	·0220	26	·0368	½	·0517	47	·0666	½	·0814
¼	·0075	¾	·0223	¼	·0372	¾	·0521	¼	·0670	¾	·0818
½	·0078	16	·0227	½	·0375	37	·0524	½	·0673	58	·0822
¾	·0082	¼	·0230	¾	·0379	¼	·0528	¾	·0677	¼	·0826
6	·0085	½	·0233	27	·0383	½	·0531	48	·0680	½	·0830
¼	·0089	¾	·0237	¼	·0386	¾	·0535	¼	·0684	¾	·0833
½	·0092	17	·0241	½	·0389	38	·0538	½	·0687	59	·0836
¾	·0096	¼	·0245	¾	·0393	¼	·0542	¾	·0691	¼	·0840
7	·0099	½	·0249	28	·0397	½	·0545	49	·0694	½	·0843
¼	·0103	¾	·0252	¼	·0401	¾	·0549	¼	·0698	¾	·0847
½	·0106	18	·0255	½	·0404	39	·0553	½	·0701	60	·0850
¾	·0110	¼	·0260	¾	·0408	¼	·0556	¾	·0705	70	·0992
8	·0113	½	·0263	29	·0411	½	·0560	50	·0708	80	·1134
¼	·0118	¾	·0267	¼	·0415	¾	·0564	¼	·0712	90	·1276
½	·0121	19	·0269	½	·0418	40	·0567	½	·0715	100	·1418
¾	·0125	¼	·0273	¾	·0422	¼	·0571	¾	·0718	200	·2836
9	·0128	½	·0277	30	·0425	½	·0574	51	·0722	300	·4254
¼	·0132	¾	·0280	¼	·0429	¾	·0578	¼	·0726	400	·5672
½	·0135	20	·0283	½	·0432	41	·0581	½	·0729	500	·7090
¾	·0139	¼	·0287	¾	·0436	¼	·0585	¾	·0732	600	·8506
10	·0142	½	·0291	31	·0439	½	·0588	52	·0736	700	·9922
¼	·0146	¾	·0294	¼	·0443	¾	·0592	¼	·0740	800	1·1339
½	·0149	21	·0298	½	·0446	42	·0595	½	·0744	900	1·2755

Note.—One Irish Acre = 70,560 English square feet. One French Acre or Arpent = 54,540 English square feet.

TABLE XXXVIII.—Multipliers when the Surface slopes transversely.

Slopes of Cuttings and Embankments.	Transverse Slopes of Surface of Ground.							
	1 in 11	1 in 12	1 in 14	1 in 16	1 in 18	1 in 20	1 in 25	1 in 30
½ to 1	·501	·500	...	...	...	...	...	...
1 to 1	1·007	1·005	1·004	1·003	1·002	1·001	...	...
1½ to 1	1·528	1·524	1·516	1·511	1·509	1·508	1·505	1·503
2 to 1	2·068	2·056	2·036	2·024	2·020	2·017	2·010	2·005
2½ to 1	2·640	2·618	2·579	2·556	2·544	2·536	2·524	2·514
3 to 1	3·245	3·209	3·145	3·101	3·076	3·070	3·049	3·031

TABLE XXXIX.—Gravity due to Gradients.

Inclination.	Gravity in lbs. per Ton.	Inclination.	Gravity in lbs. per Ton.	Inclination.	Gravity in lbs. per Ton.	Inclination.	Gravity in lbs. per Ton.	Inclination.	Gravity in lbs. per Ton.
1 in		1 in		1 in		1 in		1 in	
10	224·000	26	86·152	42	53·333	58	38·620	200	11·200
11	203·636	27	82·960	43	52·092	59	37·966	250	8·960
12	186·672	28	80·000	44	50·908	60	37·333	300	7·466
13	172·304	29	77·240	45	49·777	65	34·460	350	6·400
14	160·000	30	74·666	46	48·684	70	32·000	400	5·600
15	149·333	31	72·216	47	47·660	75	29·867	500	4·480
16	140·000	32	70·000	48	46·688	80	28·000	600	3·733
17	131·764	33	67·880	49	45·716	85	26·353	700	3·200
18	124·444	34	65·882	50	44·800	90	24·888	800	2·800
19	117·894	35	64·000	51	43·920	95	23·579	900	2·488
20	112·000	36	62·222	52	43·076	100	22·400	1,000	2·240
21	106·666	37	60·540	53	42·264	120	18·666	2,000	1·120
22	101·816	38	58·947	54	41·480	140	16·000	3,000	·746
23	97·368	39	57·436	55	40·726	150	14·933	...	...
24	93·336	40	56·000	56	40·000	160	14·000	...	...
25	89·600	41	54·634	57	39·298	180	12·444	...	...

TABLE XL.—Resistances on different sorts of Roads.

On well-made pavement, the draught per ton is	33 lbs.
On a broken stone surface, or old flint road, the draught per ton is ...	65 lbs.
On a gravel road, the draught per ton is	147 lbs.
On broken stone, with rough pavement foundation, the draught per ton is	46 lbs.
On broken stone, with concrete foundation, the draught per ton is ...	46 lbs.
On a common Railway, the draught per ton is	10 lbs.

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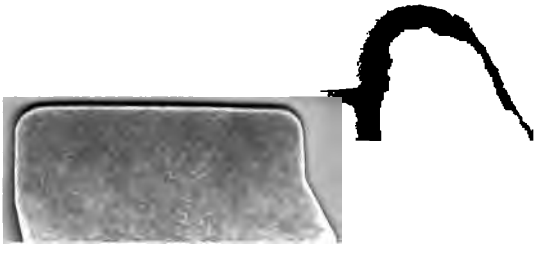

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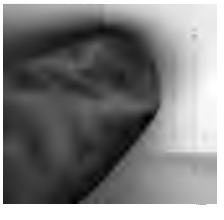

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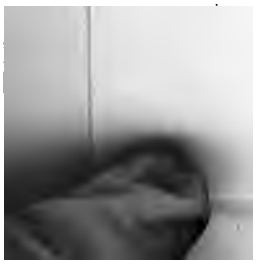

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